

OL 86 NO. 7

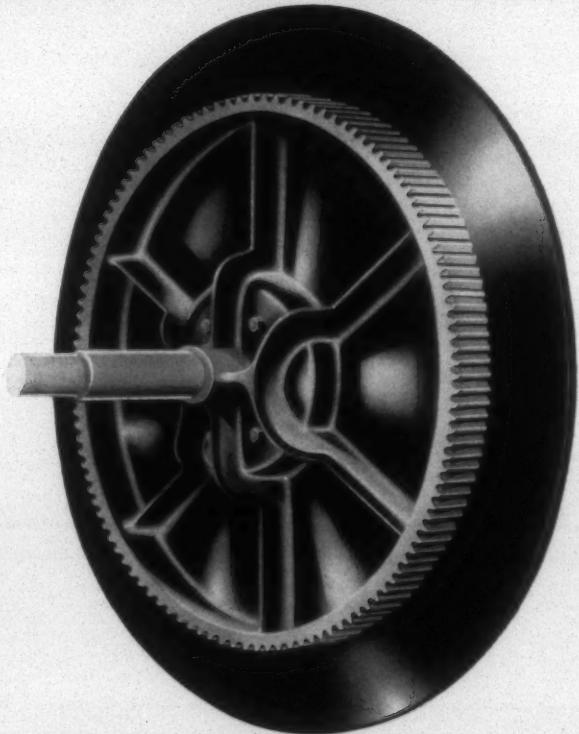
C677
T35B

textile bulletin

JULY • 1960

A Review Of
Atlantic City
(Page 29)

S. C. Textile Manufacturers Hold Annual Meeting At Sea Island	60
Georgia Textile Manufacturers Hold Their 60th Annual Convention	63
News Of The Trade	68



West Point Foundry
Your best source for

BEAM HEADS & LOOM BEAMS

IN
C. **TEXTILE BULLETIN** is published monthly by Clark Publishing Co., 218 West Morehead St., Charlotte 6, N.C. Subscription \$1.50 per year in advance, \$2 for two years. Entered as second-class mail matter March 2, 1911, at Postoffice, Charlotte, N. C., under Act of Congress, March 2, 1897.

CAST IRON HEADS: Accurately machined cut-tooth or well molded cast-tooth.

With or without recess for beam barrel. • With friction drum for friction let-off.

All sizes . . . many patterns available for prompt service.

BEAM BARRELS: Wood or metal to your specifications.

WEST POINT  *Foundry & Machine Company*

WEST POINT, GEORGIA



GOOD WOOD!

Check your inventory

on wooden parts:

Adapters & Cones

Battery Discs

Binders & Loom Swells

Clearer Boards & Rolls

Dobby Chain Cylinders

*Harness & Dobby
Sheaves*

Jack Sticks & Parts

Lays & Lay Parts

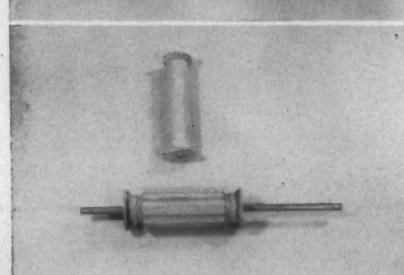
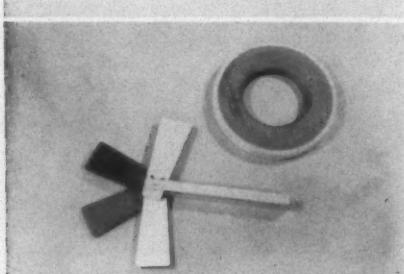
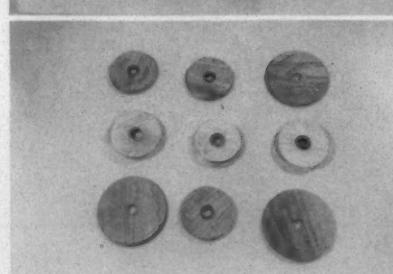
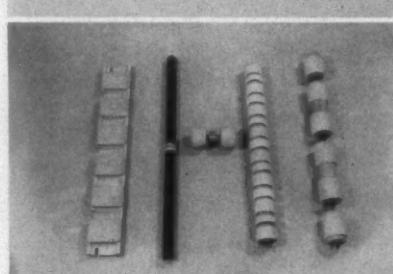
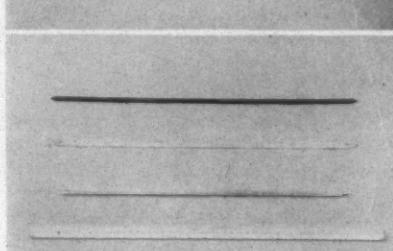
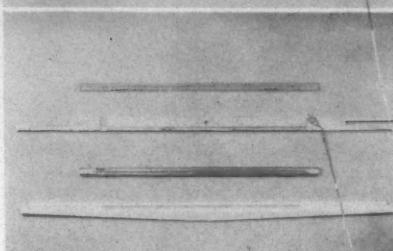
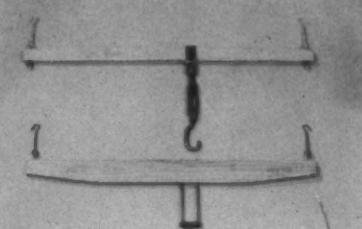
Handrails & Reed Caps

*Leece Rods & Warp
Clamps*

Loom Flags

*Lug Hold-ups, Blocks
& Straps*

Pickersticks



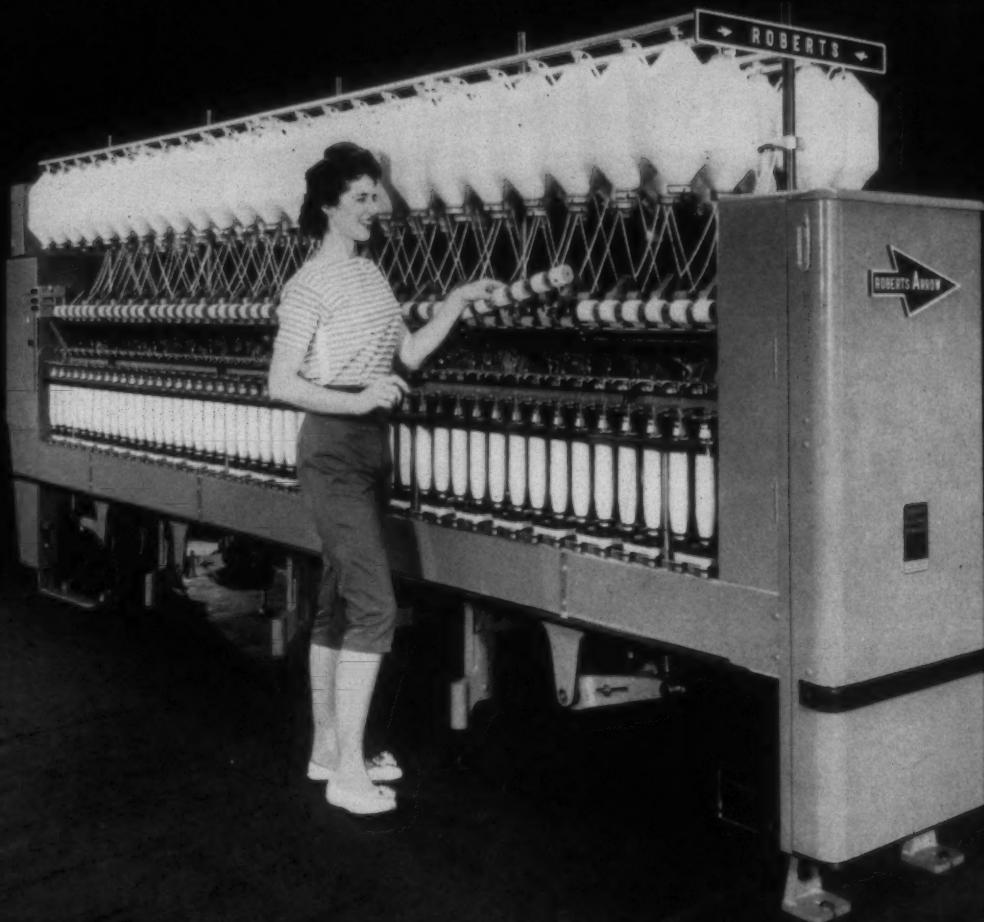
**P.O. Box 772
Greenville, S.C.**



Louis Batson Company

CHECK BATSON for good wood parts. Let us prove to you that our fine quality woods, excellent workmanship, prompt delivery make Batson your best source for wooden parts. Phone Greenville CEdar 2-7691 and take the woe out of your woods.

ROBERTS ARROW SPINNING



Spindle Speeds Over 13,000!

One of the most frequent questions asked today concerns high spindle speeds. The answer comes from many of the 850 Roberts Arrow Spinning Frames running in leading mills since 1956. Three examples are shown at the right.

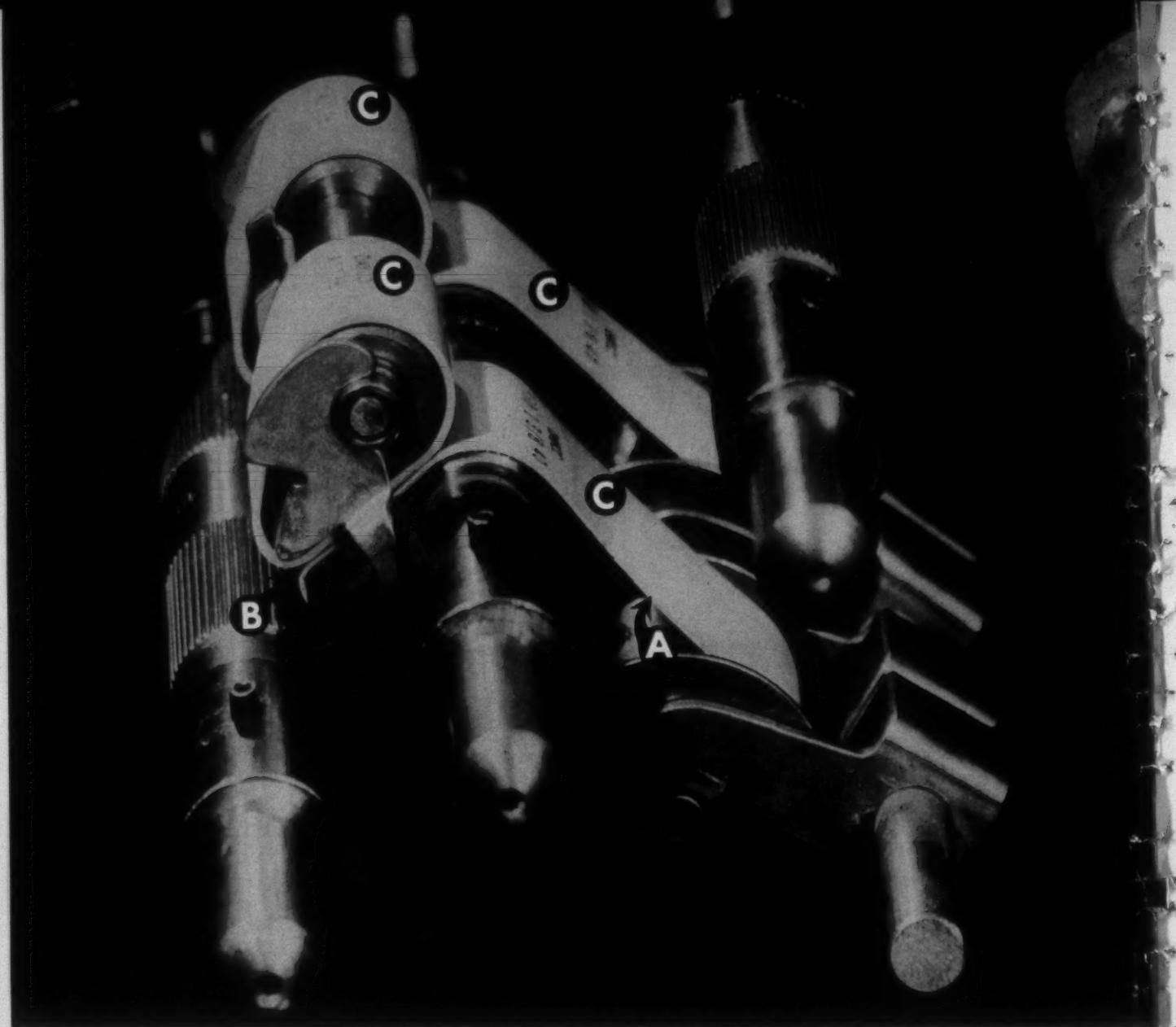
The new and refined Arrow compares advantageously with all other all-ball-bearing frames and greatly outperforms all conventional and standard-type spinning frames. The Arrow offers the greatest dollar-for-dollar-value against any other make of frame in dependable performance, lowest initial cost, and maintenance-free operation.

Arrow Spinning is available for either the cotton or the worsted system for natural or man-made fibers or blends.

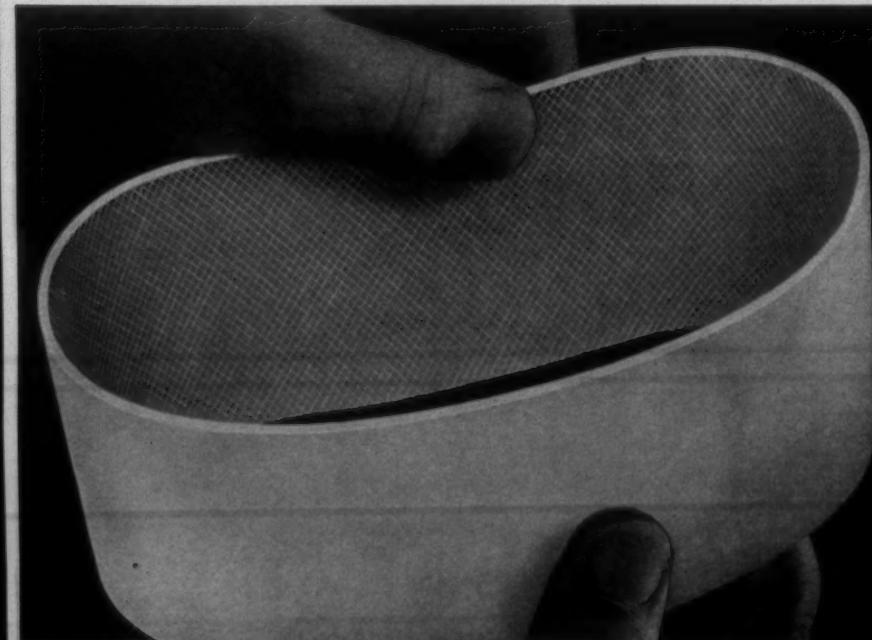
3 MILLS RUNNING ARROW FRAMES AT 12,300 to 13,200 R.P.M.

- A major sheet manufacturer runs 36's warp yarn with 2" ring at 12,300 r.p.m. spindle speed on 44 Arrow frames.
- A major manufacturer of Dacron-cotton fabrics runs 50's on 66 Arrow frames with a 1-7/8" ring at 13,200 r.p.m. spindle speed.
- A major broadcloth manufacturer using 96 Arrow frames makes 40's with a 1-13/16" ring at 12,800 r.p.m. spindle speed.

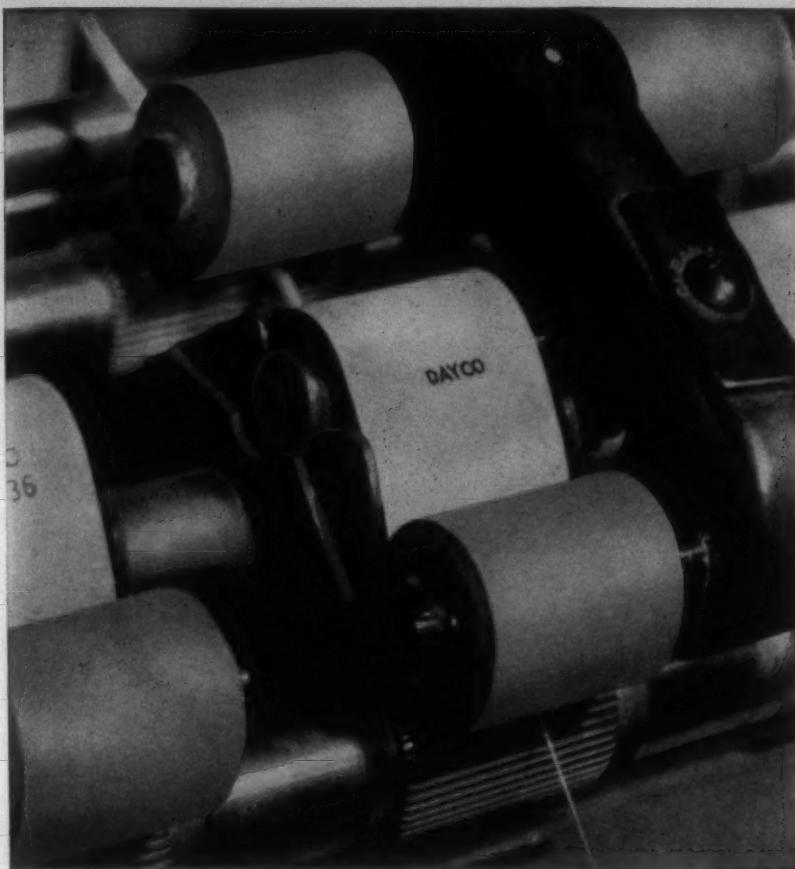
ROBERTS COMPANY
SANFORD, NORTH CAROLINA



ACTUAL WORKING MODEL of long-apron system shows: (A) Patented embossed surface for precise coefficient of friction and abrasion-resistance formulated to last for years; (B) Unmatched flexibility at nose-bar for consistently smoother performance and top quality yarn; (C) Guaranteed yarn control due to a cleaner spinning outside surface.



EXCLUSIVE . . . patented by Dayco . . . your only source for this important friction-right improvement in aprons that made possible lower power and increased production. It's another example of Dayco's continuous research program to increase economies and production.



A COT FOR EVERY PURPOSE—as well as a virtually all-purpose cot! That's the great Dayco story to meet every need for surface texture, densities, dimensions, sizes, kinds. Whether man-made fibers or mixtures are your spinning problem, Dayco research in the laboratory and in the field guarantees consistently better results and greater savings.

NEW RECORD-BREAKING SPIN-AND-WEAR PERFORMANCE with Dayco on any apron system

For super-quality yarn—consistently, month after month—nothing matches Dayco's patented Embossed Apron for long-apron systems. Here's super-smooth drafting action—unequalled flexibility and precision friction surfaces on both sides to meet any and all conditions.

No more tucking or jamming at the nose-bar . . . no more ozone breakdown . . . no more abrasive problems for months and months.

Improve your yarn quality . . . up your spinning performance with the pioneer and leader in the field—Dayco!

Ask your Dayco Representative to set up a trial installation. Phone or write Dayco Textile Products Co. (Formerly Dayton Rubber Co., Textile Division) 401 S. C. National Bank Bldg., Greenville, S. C.

Dayco
TEXTILE PRODUCTS CO.

Division of Dayco Corporation

OVERSEAS PLANT: THE DAYTON RUBBER CO. LTD., DUNDEE, SCOTLAND

Dayco All-Purpose Cots exceed 300,000 spindle-years WITHOUT REBUFFING

300,000 spindle years without the need of the usual periodic buffing! That's the 2½ year record from just one 120,000 spindle plant using Dayco's ALL-PURPOSE SG-60 cots.

Add to this amazing wear record the great volume of high-quality yarn coming off the production line and you can see the outstanding efficiency of the versatile SG-60.

But with more than 70 different fibre combinations running now on production lines, a wide variety of top-quality cots must be used. Now, in plant after plant, Dayco has proved its laboratory tests on its full range of cots in actual production. Dayco offers a cot for every purpose. Each one is specifically designed for outstanding performance in a specific production situation with just the precise coefficient of friction. Dayco Cots deliver more yarn... better-quality yarn in mills everywhere, year in and year out.

This is just another example of Dayco service in the cot and apron field. Dayco's broad, continuous research and laboratory facilities have brought the most practical answers to the textile industry's spinning problems. Dayco's discoveries in precision compounding have resulted in closer precision tolerances than any other on the market.

Dayco research sought and came up with the answers on super-drafting at lower horse-power. Dayco's laboratory maintains quality controls on Dayco's own production line that have no match in its field.



As tough as they come!

Carter Travelers solve quality problems ... profitably!

Equipment . . . operating conditions . . . type and count of yarn . . . spindle speeds—in every conceivable combination—are "built-in" factors found in the traveler your CARTER representative recommends.

The tougher the problem, the better we like it . . . because with years of experience, the facilities of

our own metallurgical laboratories and a modern plant . . . we can produce a traveler "precision engineered" to meet your specific needs.

Whether it is a routine requirement or a complicated special job . . . CARTER can solve your toughest traveler problem—with a top-quality, long-lasting *tough* product.

REPRESENTATIVES

R. A. Haynes, Special Representative	114 W. Fifth Ave., Gastonia, N. C.
W. T. Horton	Belmont, N. C.
D. E. Phillips	2702 Garden Lakes Blvd., Rome, Georgia
F. L. Piercy	128 Hudson St., Spartanburg, S. C.
J. R. Richie	1307 Crabapple Lane, Raleigh, N. C.
J. R. Davis	P. O. Box No. 129, Auburn, Ala.
Larry Bellerose	North Grosvenordale, Conn.
L. O. Talley	P. O. Box 1169, Mexia, Texas
Hugh Williams & Co.	27 Wellington St., E., Toronto, Ontario, Canada

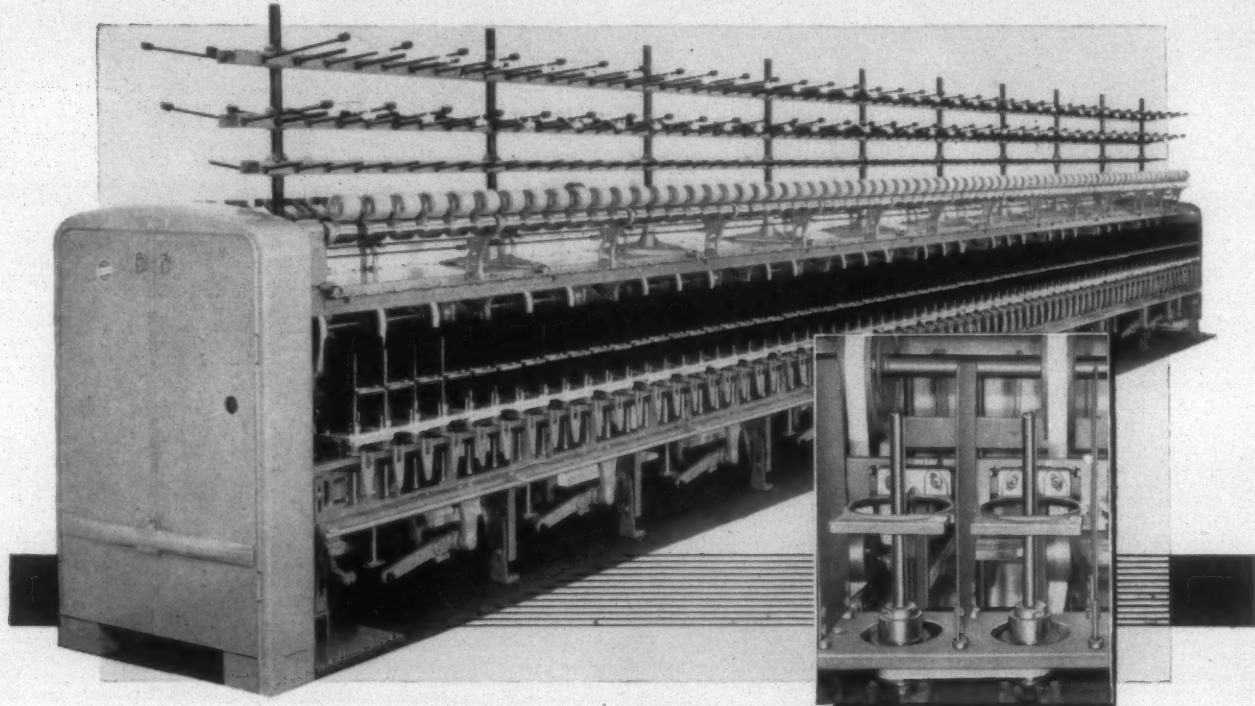
Carter
TRAVELER COMPANY

DIVISION OF A.B. CARTER, INC. MANUFACTURERS OF THE
BOYCE WEAVERS KNOTTER GASTONIA, NORTH CAROLINA

Introducing

the **PACEMAKER*** **P.3**

A NEW Twister for highest possible production on low twist synthetic yarns



The new Whitin "PACEMAKER" Model P3 Ring Twister has many unique features which provide for maximum twisting efficiency and lowest possible cost. It is capable of operating at exceedingly high speeds which makes it especially attractive for mills processing low twist synthetic yarns. This is definitely the twister for forward looking, profit-minded mills!

Examine these outstanding features — many of them exclusive with Whitin:

- ★ Head end — entire gear train mounted on antifriction bearings — laminated bakelite gears combined with metal gears for quiet operation
- ★ Feed rolls — 3" or 4" dia. boss type-hardened steel, heat treated, with chromium plated finish, mounted in grease packed ball bearings

- ★ Top rolls — aluminum cot with cork or Accotex covering
- ★ Spindle drive — 4-spindle group drive — steel pulleys on ball bearing mounted through shafts — Whitin-SKF r.b. tape tension pulleys
- ★ Stationary bottom plate over spindles — insures yarn cleanliness and supports full length separators
- ★ Ring rail construction — magnesium rail supporting ring holders having Whitin patented Micrometer adjustment
- ★ Rings — up to 5", choice of several auto-lubricated types
- ★ Spindles — latest Whitin SUPASONIC SKF HZ 55 or 66, depending upon bobbin weight — either internal or external brake — an outstanding new development in spindle design
- ★ Winds — square bottom differential taper top, square bottom taper with straight builder, and P-1 differential double taper wind on straight pirn

*TRADEMARK

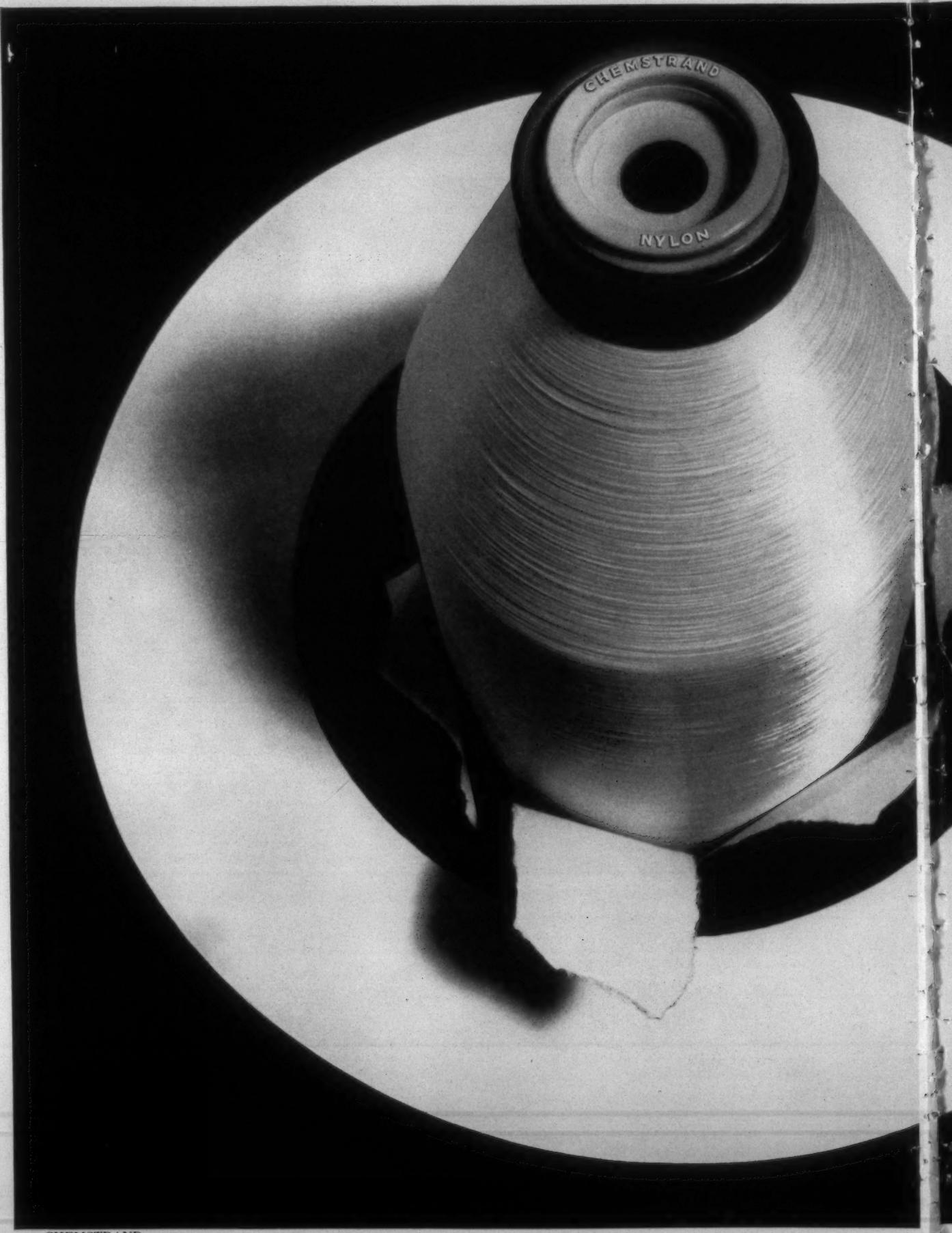


WHITIN **MACHINE WORKS**

W H I T I N S V I L L E , M A S S A C H U S E T T S

CHARLOTTE, N. C. • GREENSBORO, N. C. • ATLANTA, GA. • SPARTANBURG, S. C. • DEXTER, ME.

These are only a few of the many features. For complete information, ask your Whitin representative, or write to —



THE CHEMSTRAND CORPORATION • GENERAL SALES OFFICES: 350 FIFTH AVENUE, NEW YORK 1, N. Y.
DISTRICT SALES OFFICES: 350 Fifth Ave., New York 1; 3½ Overwood Rd., Akron, Ohio; 197 First Ave., Needham Heights, Mass.; 129 West Trade St., Charlotte, N. C.; California Office: 707

From Chemstrand comes **CADON!**

**The new multilobal NYLON yarn that
lets you do more than ever before!**

Knit it, weave it, dye it, print it—for dresses, blouses, lingerie, sleepwear, uniforms, outerwear shells, sweaters, sport shirts, beach and swim wear and all types of linings! The multilobal cross-section of new Cadon nylon yarn opens a wide range of fabric and styling opportunities because:

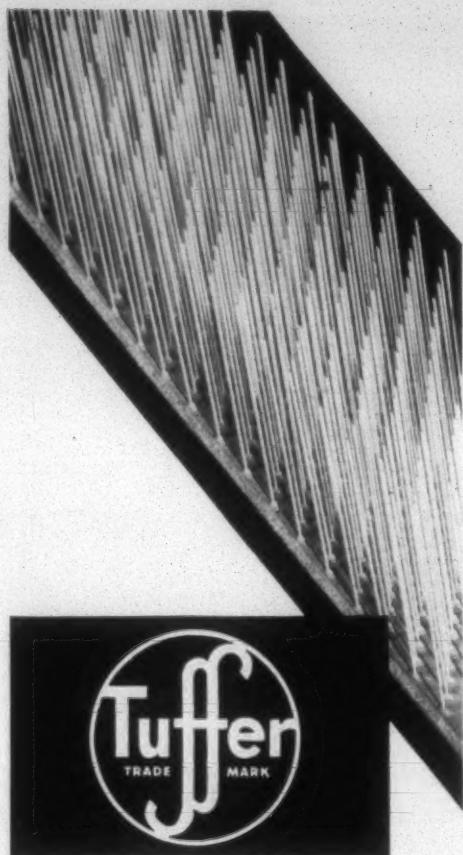
- 1 Cadon's appearance is lustrous, richly smooth; makes knits and woven fabrics different.
- 2 Cadon's covering power is greater than round-section yarns; gives opacity to permit lighter-weight fabrics.
- 3 Cadon's surface is perfect for printing; takes delicate or strong patterns and holds them sharply.
- 4 Cadon's wicking properties are excellent; moisture is spread for fast evaporation to insure greater comfort.
- 5 Cadon's hand is something special! It's springy, almost alive. You can't describe it—you have to feel it! Most importantly, Cadon has been thoroughly tested under commercial conditions during an extensive (and intensive) development period. To learn how Cadon fits into your line, call your Chemstrand representative. He's got the whole story on this new and exciting yarn.

Cadon nylon by Chemstrand



*Trademark of The Chemstrand Corporation for multilobal nylon yarn. Chemstrand makes only the yarn; America's finest mills and manufacturers do the rest.

South Hill St., Los Angeles 14. Canadian Agency: Fawcett & Co., 34 High Park Blvd., Toronto, Canada. PLANTS: CHEMSTRAND® NYLON—Pensacola, Fla.; ACRILAN® ACRYLIC FIBER—Decatur, Ala.



FANCIES that insure the best carding

**This Tuffer promise is based
on three important factors:**

1. The FOUNDATION material is carefully inspected and selected for each type of fancy by our own skilled men, in our own plant.
2. The WIRE is tough, strong and of even temper, with just the right carbon content.
3. Tuffer ENGINEERING SERVICE is always available. When a carding problem develops, a Tuffer man will work with your key men, in your own mill, to determine the best solution. Special foundations or special wires recommended by Tuffer engineers have resolved many carding problems.

The combination of these factors is your guarantee of the finest fancies you can find—anywhere.

*Call or Write to our Home Office
for Immediate Attention—No Obligation*

TUFFER PRODUCTS →

- Card Clothing for Woolen, Worsted, Cotton, Asbestos and Man-made Fibers
- Napper Clothing and Brushes
- Top Flats re-covered and extra sets loaned at all Plants
- Lickerins rewired at Southern Plants
- Hand Stripping Cards

HOWARD BROS.

WORCESTER 8, MASSACHUSETTS

Southern Plants: Atlanta, Ga., Gastonia, N. C., Greenville, S. C.

Direct Representation in Canada

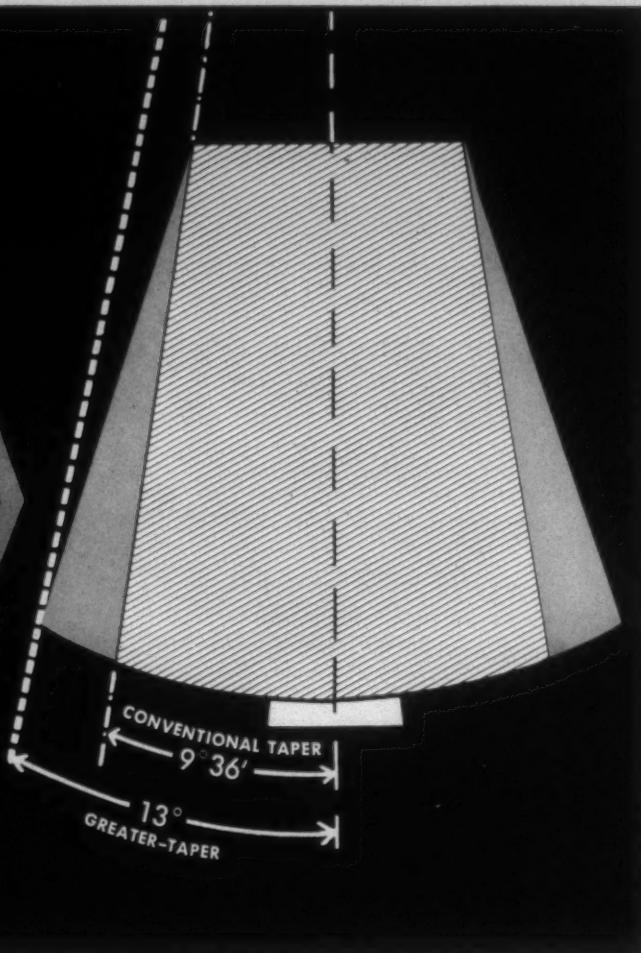
THE FOSTER GREATER-TAPER CONE...

Why Knitters Need It

If you sell spun knitting yarns, or if you are a knitter and do your own winding, you *need* the Foster Greater-Taper Cone, produced on the Foster Model 102.

This is because Foster Greater-Taper Cone delivers freely with minimum drag at the knitting machine and thus prevents tight loops and even at times prevents breaks.

It's all a matter of clearance of yarn when the cone is full. Note in the illustration that the yarn

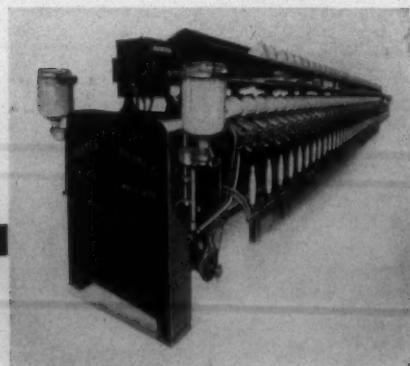


does *not* clear the nose of a conventional 9°36' cone, but that it *does* clear the nose of the Foster Greater-Taper Cone, with room to spare, because the latter has a 13° taper, when full.

If you spin sale yarn, wind it on the Foster Model 102 and be prepared to supply the cone that knitters *need*.

If you buy yarn on cones ready for the knitting machine, insist that the cones be Foster Greater-Taper Cones and thus protect the quality of your fabrics.

THE FOSTER MODEL 102 WITH YARN CONDITIONING ATTACHMENT



553-9

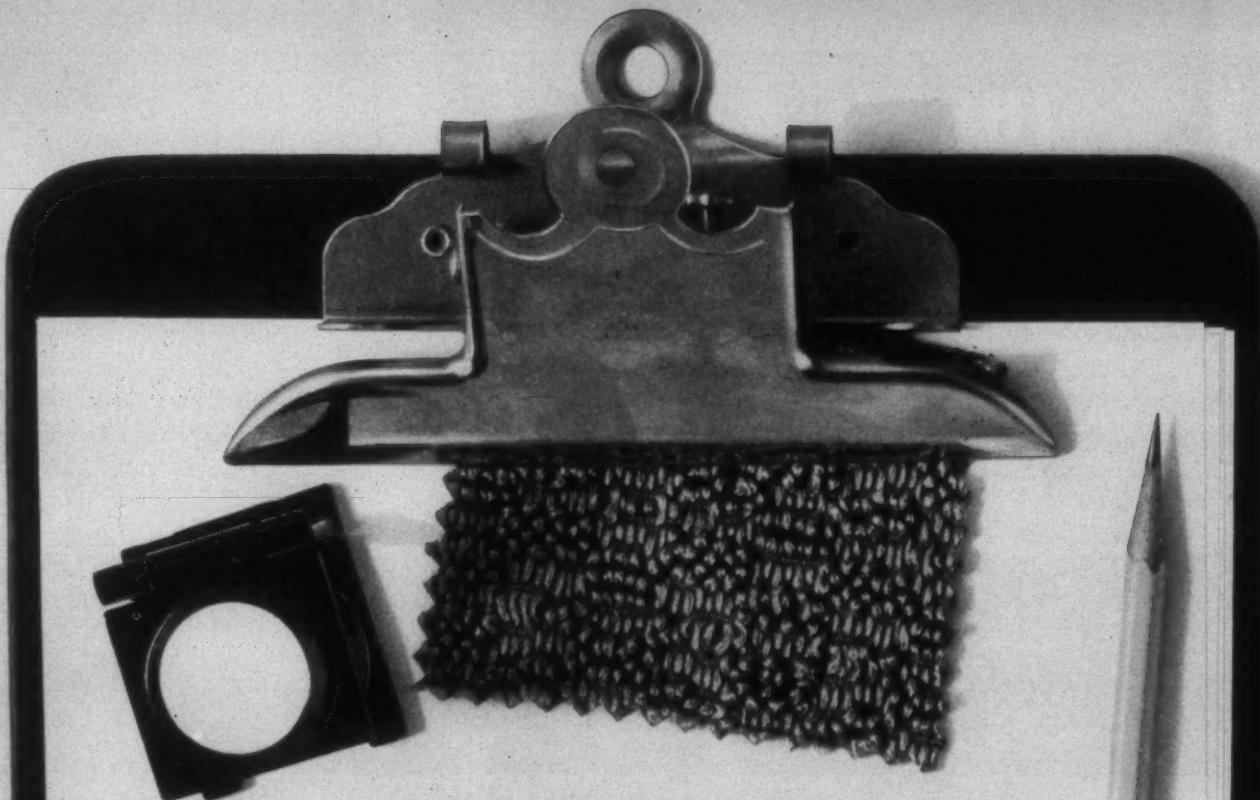
FOSTER MACHINE COMPANY

A Yarn Winder for Every Purpose

Westfield, Massachusetts, U.S.A.

SOUTHERN OFFICE — Johnston Bldg., Charlotte, N. C. • CANADIAN REPRESENTATIVE — Ross Whitehead & Co., Ltd., 2015 Mountain St., Montreal, Que. and 100 Dixie Plaza, Port Credit, Ont. • EUROPEAN REPRESENTATIVE — Muschamp Textile Machinery (Sales) Limited, Eider Works, Wellington Road, Ashton-under-Lyne, Lancashire, England.

ACETATE...one



CELANESE ACETATE FAMILY

CELAIRE

CELAPERM

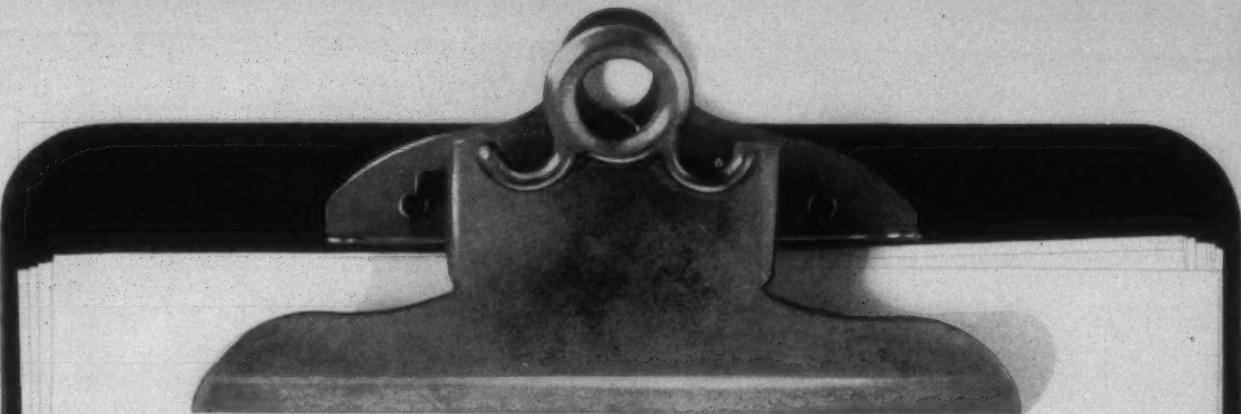
TYPE F

CELAFOFT

HEAVY DENIERS

NOVELTIES

of today's most versatile textile fibers



CELALOFT acetate is only one of the many examples of acetate which are specially engineered to provide you with the answers to specific needs in home furnishings and apparel fabrics. Celaloft is a bulked acetate and adds greater coverage, fullness of hand and the expensive fabric look that belies its actual price. Much more lavish textures are possible with Celaloft, as evidenced in many of the new loop pile upholstery fabrics.

Celaloft yarns are now available in dull and bright, and in Celaperm solution-dyed acetate colors as well. To take advantage of the potentialities of Celaloft, let Celanese work with you to develop new fabric constructions. Celanese Fibers Company, a division of Celanese Corporation of America, Box 1414, Charlotte 1, N. C.

Celanese® Celaire® Celaloft® Celaperm® Type F T.M.

Acetate...a *Celanese* contemporary fiber

DISTRICT SALES OFFICES: 180 Madison Avenue, New York 16, N. Y.; 15 N. Broadway, Des Plaines, Ill.; Western Merchandise Mart., Room 478, San Francisco, Calif.; P. O. Box 1414, Charlotte 1, N. C.; 200 Boylston St., Chestnut Hill 67, Mass.; 3130 Maple Drive, N.E., Atlanta 5, Ga.

EXPORT SALES: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Ave., New York 16.

IN CANADA: Chemcell Fibers Limited, 1600 Dorchester Street West, Montreal, Quebec.

For The Textile Industry's Use

- NEW MACHINERY, EQUIPMENT AND SUPPLIES -

Thick Teflon Coating

The Manhattan Rubber Division of Raybestos-Manhattan, Passaic, N. J., has announced the availability of a relatively thick Teflon covering for steel, aluminum and fiber rolls. Seamless, homogeneous curing of the Teflon to these metals in thicknesses to .030" is said to assure long life to the user without the problems associated with sprayed-on Teflon, such as peeling and rapid wear. Manhattan Teflon roll covers can be reground, if necessary.

Numerous applications for the Manhattan Teflon rolls are anticipated in textiles for coating and size drums, and gluing rolls.

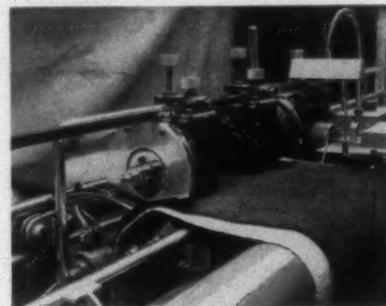
Facilities are presently available to provide coatings up to .030" on rolls up to 4" in diameter with a maximum over-all length of 15'. Greater thicknesses and larger rolls can be handled on a special custom basis.

(Request Item No. G-1)

sticks are glass mat base epoxy resin laminate, and lead cable is protected by moisture-proof silicone rubber.

(Request Item No. G-2)

Tufted Carpet Trimmer



A close-up of British Tufting Machinery's new carpet slitting and trimming machine showing untufted backing dropping away.

British Tufting Machinery Ltd., Lancashire, England, has developed an automatic carpet slitting and/or trimming machine for the tufted carpet industry. The new unit receives carpet from the coater and stores it with the selvage untrimmed. This prevents any possible damage that can result from storage. When required for trimming, the carpet is mounted on an unroll stand at the front of the machine. It is then taken into the slitting and trimming machine with the pile facing upwards.

The stator windings are thoroughly encapsulated in a specially formulated epoxy resin for resistance to moisture, oils, dust, chemicals, acids and alkalies. The bearings, exposed internal metal surfaces, hardware and mechanical parts are also protected against damage from the elements and contaminating atmospheres in all types of indoor and outdoor applications.

The full Class B insulation system is built around the epoxy resin, which will not change form with heat. The system employs polyester round copper magnetic coil wire, epoxy-insulated glass fiber sleeving, epoxy-treated fiber glass cloth slot liners and phase insulation. Separators and top

The unit features a sensing and tracking head to guide the cutting rollers. A finger on the sensing head runs along the outside row of tufts. The finger is connected to micro-switches. Any lateral movement of the carpet moves the finger, which in turn causes the tracking head to move.

The tracking head consists of an electric motor and reduction gear which drives two pinion wheels that are constantly in mesh with two chains mounted on the head of the machine.

The two selvage trimming units are mounted on wheels that move on rails run-

ning across the machine. These trimming units are connected by thumbscrews to a bar that is graduated in feet and inches. This bar is also coupled to the tracking head. As a result the trimmers and the tracking head move together in unison to trim the carpet to a pre-set spacing.

Two fractional horsepower motors drive each trimming unit through reduction gears. The actual cutting is done by twin disc-shaped cutters. As they run at slow speeds the cutters are said to have a long life between re-sharpening.

If the carpet is to be slit into two or more narrow widths, more slitting heads can be mounted on the rails and run in conjunction with the trimmers. Behind the machine a rolling-up unit can be fitted to take the trimmed or slit rolls.

Trimmed selvages drop into containers mounted below the trimming unit. Normally the unit runs at 12 to 14 f.p.m. but by means of a variable speed drive the speed can be adjusted to suit the carpet being handled.

(Request Item No. G-3)

Cationic Softener

A new cationic softener has been introduced by the Onyx Chemical Corp. Called Onyxan FW-25%, the new product is said to disperse in tap water, thereby eliminating the necessity of boiling or cooking with open steam, as is the case with most cationic softener pastes.

Onyxan FW-25% is white in color, and is said to have high resistance to discoloration. Among the suggested uses are as a lubricant for acid fulling, an exhaust-type softener for long bath applications and a yarn and skein lubricant following dyeing.

(Request Item No. G-4)

Generators

A new line of Precise Power and Special Brushless a.c. generators and motor generators has been announced by The Lima Electric Motor Co., Lima, Ohio, a subsidiary of Consolidated Diesel Electric Corp.

Lima Precise Power a.c. generators and motor generators are available in ratings from 5 k.w. through 100 k.w. in open type construction with static exciter-regulators. Inherent regulation to $\pm 10\%$, or magnetic amplifier regulation to $\pm 1\%$ is available.

The Special Brushless a.c. generators with dripproof construction are adaptable for engine mount or direct coupling to driving motor. Lima synchronous generators, rated from 5 k.w. at 1,800 r.p.m. through 100 k.w. at 1,800 r.p.m. are equipped with induction-exciter-regulators; inherent regulation with no external controls.

Totally enclosed fan-cooled types are rated at 5 k.w. at 1,800 r.p.m. through 50 k.w. at 1,800 r.p.m. Lima brushless gener-

LENGTHEN - SPREAD - RECONDITION

Flyers converted to fit your present needs. The "Price" way cuts costs on conversions by lengthening and spreading Flyers to produce larger packages. Let the "Price" way be your way to save money on all your Flyer and Presser problems.

Write or Call

PRICE SPINDLE & FLYER COMPANY, INC.

Phone 8829

Box 401

Spartanburg, S. C.

MIRACLE SIZE FOR MIRACLE BLENDS



Kofilm

KOFILM gets new blends off to a fast start. Eliminates start-up adjustments and shutdowns. Permits high-speed weaving of any blend of fibers—from the newest to the oldest.

KOFILM is a noncongealing, chemically-treated starch warp size. It forms exceptional films. High in

ACETYLATED STARCH DERIVATIVE

strength. Extremely flexible. Very tough. Insures top efficiency the way no other starch can.

KOFILM is quick and simple to use. A National Textile Specialist will be glad to demonstrate its advantages. Write or call your nearest National office to make arrangements.

National
STARCHES

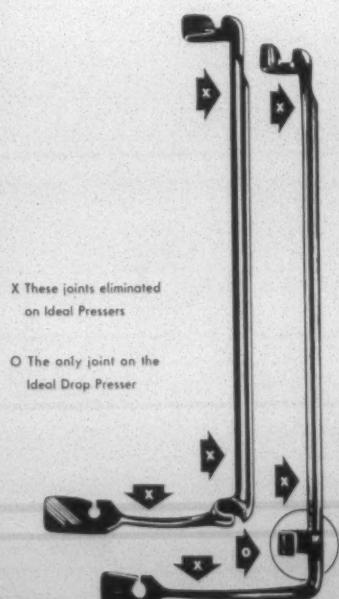
NATIONAL STARCH and CHEMICAL CORPORATION

750 Third Avenue, New York 17 • 3641 So. Washtenaw Avenue, Chicago 32 • 735 Battery Street, San Francisco 11

Ideal Pressers Now Stronger Last Longer

Ideal Conventional Pressers are now made in ONE piece and Ideal Drop Pressers in TWO, replacing the four and five piece pressers universally used before. This eliminates three comparatively weak (and expensive) points in each presser and assures infinitely longer service.

This is the latest of the many improvements in roving which Ideal has made. Let us send you samples and show you how Ideal Drop Pressers, adjustable spindle steps, self lubricating cardroom spindles, and other Ideal features enable you to get firmer and more uniform roving and add more roving to each bobbin.



Ideal Industries, Inc.
Bessemer City, N. C.

FOR THE TEXTILE INDUSTRY'S USE—

ators are said to have the capacity to handle very high, intermittent, low power factor loads with minimum voltage dip.

(Request Item No. G-5)

Light Blue

Sandoz Inc., New York City, has introduced brilliant Alizarine Light Blue 3FR, a new member of its range of Brilliant Alizarine acid dyestuffs. The new dye is of very bright shade and is of interest primarily for self shades. It is recommended for dyeing in the yarn or piece, especially baby blues, where the desired brilliance of shade cannot easily be obtained with other dyestuffs. It is said to feature high light fastness on nylon and silk.

(Request Item No. G-6)

Wetting Agent

Dow Chemical Co., Midland, Mich., has announced the availability in commercial quantities of the solvent 1,4-dioxane. A cyclic ether, the chemical is used as a wetting and dispersing agent, as a dyeing aid and as an extraction agent. Dow said the product also has shown potential utility as a spinning agent for acetate fiber.

Soluble in water and a wide range of organic solvents, 1,4-dioxane is said to be little affected by acids, alkalies and mild oxidizing agents.

(Request Item No. G-7)

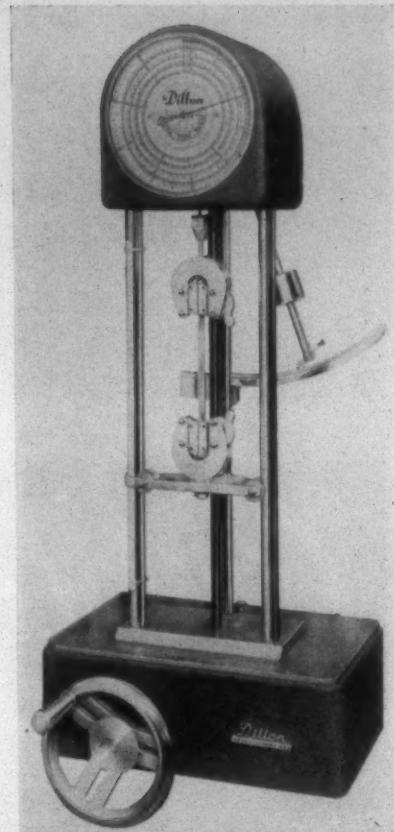
Tensile Tester

A new testing instrument which provides for simple changes in grips to quickly adapt it for tests of tensile, compression, transverse and shear forces has been introduced by W. C. Dillon & Co., Van Nuys, Calif.

Operation of the unit is by means of a calibrated pendulum. All testers are guaranteed accurate within $1/2\%$ of indicated reading in accordance with A.S.T.M. requirements.

Wide flexibility is provided by the five ranges, from 0-10 lbs. to 0-300 lbs., combined on the one 8" dial. Calibration is available in a choice of ounces, tenths of pounds or kilos. Permanent stress-strain curves are also possible with the Dillon rotating drum recording system as an accessory.

Dillon Model M testers are available



with manual handwheel, or motorized. The units can be converted from manual to motorized at any time with a Dillon motorization kit. They are also supplied with a built-in controlled temperature cabinet with working ranges from room temperature to 400° F.

(Request Item No. G-8)

Lab And Production Mixers

A line of highly versatile mixers for the laboratory and for production is now available under the name of Barrington Convertible Jet Mixer, from Barrington Industries Inc., Providence, R. I.

The models range from $1/4$ to 15 h.p. sizes, ranging in mixing capacities from 3 to 3,000 gals. Each model may be converted in seconds from closed turbine to open turbine mixer, or vice versa, providing a dual application mixer in a single unit, Barrington reports.

The Barrington mixers are said to mix, blend, disperse and homogenize materials of any viscosity which can be pumped or



Single Cylinder Waste Machines

with K & D Hopper Feeders, for profitable, efficient waste processing

High-Compression Lap Systems

Aluminum High Speed Sargent Combs for Hoppers

Ball Bearing Drop Shaft Levers for Pickers

Roller Bearing Lap Pins

KIRKMAN & DIXON MACHINERY CO.

OR 3-3346

Greenwood, S. C.

forced through the mixing head of the mixer. At shaft speeds of up to 8,000 r.p.m. for the laboratory models and 3,600 r.p.m. for the production units, the rotors are said to create tremendous forces of shear and impact as the material being processed is forced between the rotor and stator as it moves through the mixing head.

The distance between the rotor and the stator can be readily changed to decrease or increase the degree of shear and impact to which the material is subjected in the mixing head. Excessively viscous, gelatinous or highly thixotropic materials can be readily processed by removing the stator sleeve and operating the unit as an open turbine mixer.

The mixers are designed to draw the material being processed from below and to force it upward through the restricted jet openings of the mixing head without forming a vortex and without incorporating air in the material.

They are said to be suitable for breaking the structure, for the liquification and for the dispersion of pigment press cakes, and for the dispersion of pigments and other solids in liquids.

All parts of the mixers are said to be readily accessible for cleaning, sanitizing, and disinfecting. All contact metals are of stainless steel. (Request Item No. G-9)

Wear-Resistance Tester



Fibertest Inc., Grove City, Pa., has introduced a new wear-resistance tester. Developed by Dow Chemical Co., Midland, Mich., the Fiber Flex tester measures the wear-resistance of up to ten fibers as they are flexed back and forth over the corner of a pencil-thin carbide bar at the rate of 100 flexing cycles a minute. When a fiber

breaks, a mechanical counter stops, giving a quick report on the fiber's endurance.

Dow developed the Fiber Flex while studying the relation of single fiber properties to the wear life of fabrics. Dow researchers discovered that when single fibers are flexed over a rounded edge the number of flexing cycles before failure is linearly related to the radius of the curvature of the edge of the flexing bar and to the tension per square foot of denier of the fiber.

As a result, the Fiber Flex tester flexing bar, which has a matte finish to provide minimum friction surface, has four edges with the following radii: .0005, .001, .002 and .005". This permits the selection of a radius which is nearly equal to the radius of the fiber under test.

(Request Item No. G-10)

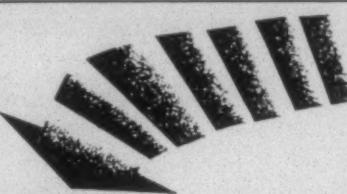
Automatic Doffing Unit

Willcox & Gibbs, New York City, has announced its entry into the primary textile equipment field with the introduction of the Treufus automatic doffing machine as adapted for American spinning equipment. According to Willcox & Gibbs, the unit automatically doffs full bobbins and simultaneously replaces empty bobbins. The elements for both the doffing and donning operations are housed in a compact mobile unit. The Treufus can be used without modification on spinning frames of all gauges, it is reported.

Ultimate efficiency has not been determined, the company says; however, bobbins can be doffed and replaced at a rate in excess of 18,000 per hour. When full allowance is made for engaging and disengaging the unit, unloading doffed bobbins, replenishing empty bobbins, the effective doffing and replacement rate is estimated to be from 6,000 to 8,000 per hour.

The Treufus is manually operated. No electric drives are involved and consequently no wiring connections are necessary. It moves on wheels and the undercarriage is provided with hydraulic means by which the unit can be readily raised and lowered.

The doffing operation is accomplished by a series of bridge-like members which form an inclined plane. The base of each bridge member is equipped with an open plow-like element. The first bridge engages the base of the bobbin, and by virtue of the forward motion of the machine breaks the contact



Ideal Flyer Reconditioning Service Assures Perfect Bobbin Build

Your worn flyers, spindles, pressers, and bolsters are completely rebuilt to standard specifications at a fraction of the cost of new equipment. All parts are guaranteed to work in perfect harmony and to produce bobbins of uniform size, length, and density with no top or bottom runovers. This service includes:

FLYERS Noses and barrel hubs realigned . . . barrel hubs die-swaged full length and reamed to standard taper . . . legs repaired and reinforced . . . worn ends rebuilt and refinished . . . flyers reblocked . . . your choice of finishes . . . and Selecto-Speed Balancing* for smooth running at all practical speeds.

PRESSERS blocked with proper curve and balance, or replaced.

SPINDLES AND BOLSTERS rebuilt or replaced.

ADJUSTABLE SPINDLE STEPS produce uniform bobbins regardless of wear or inaccuracies in other parts.

FOR EXTRA FAST SERVICE Ideal now carries large stocks of flyer assemblies in most popular makes and sizes and can ship promptly—allowing you a generous trade-in value on your old equipment. Let us give you full information and prices.

*Patented

Ideal Industries, Inc.
Bessemer City, N. C.

Continuous Service to Textile Mills Since 1925

Carolina
LOOM REED CO., INC.



A Carolina Reed

Manufacturers of

ALL METAL CARBON AND STAINLESS STEEL REEDS

PITCH BAND AND METAL COMBS

DROP WIRE AND HEDDLE BARS

P. O. Box 1536

GREENSBORO, N. C.

Phone BR 4-7631

FOR THE TEXTILE INDUSTRY'S USE—

of the bobbin with the spindle and partly raises the bobbin on the spindle. The succeeding bridge members as they pass each spindle and its related bobbin, because they form an inclined plane, raise the bobbin vertically on the spindle until it is completely separated and slides down a chute to a receiving box in the unit.

Empty bobbins are loaded in a drum and are fed automatically to a point of discharge from which they are released by a sensing device which triggers a releasing mechanism. The releasing mechanism is synchronized by the sensing device which bears against the spindle thus timing the

accurate placement of the bobbins on the spindles. A spring loaded hammer makes contact with the top of the replacement bobbin coincidentally with its release by the triggering mechanism.

(Request Item No. G-11)

Bind-Free Casters

A new solution for the elimination of the binding action of yarn and lint on the wheels of a textile caster is offered by the Fairbanks Co., New York City.

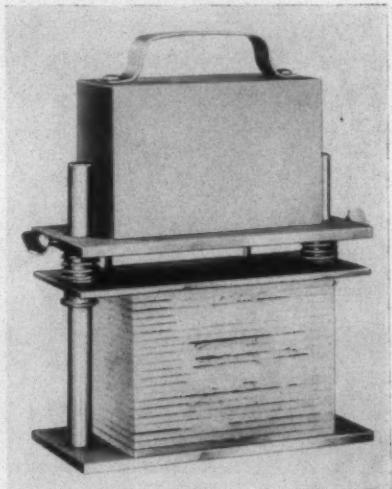
Two direction protection against the accumulation of yarn and lint on the wheel axle is said to be achieved by the design of a precision cast semi-steel wheel. A step is

cast on the web of the wheel so that in addition to the tight fit of the periphery of the thread guard to the concentric inner surface of the wheel tread, there is the right angle protection of the tight fit of the thread guard to the step. The step on the web also protects the thread guard by preventing deformation due to blows and impacts.

The new caster is assembled with spacer washers between the thread guards and the legs of the caster. The spacer washer eliminates the common V-trap so that thread and lint will fall freely through the caster fork—but should the thread or lint catch, it can be cleaned out without the need of removing the wheel.

(Request Item No. G-12)

Perspiration Tester



Atlas Electric Devices Co., Chicago, Ill., announces that it has developed an inexpensive, compact new A.A.T.C.C. perspiration tester.

The unit, Model PR-1, will test from 1 to 20 samples at a time. It is made of stainless steel with plastic plates and a metal weight. The Atlas tester is loaded vertically. After the top plate is locked in place with thumb screws, the weight is removed and the unit is turned over and placed in the oven in a horizontal position. A 10-lb. dead weight loading is utilized with springs compensating for any shrinkage occurring as specimens dry out.

Separate units are recommended for use on acid and alkaline tests to prevent the possibility of interaction. A single weight will suffice when two or more units are employed in a single laboratory.

(Request Item No. G-13)

Premetallized Grey

The addition of National Lanamid Grey GBL to its expanding line of neutral dyeing, premetallized dyes, has been announced by Allied Chemical's National Aniline Division, New York City.

National Lanamid Grey GBL is said to be substantially equal to Lanamid Grey G in washfastness and fastness to light, having very good fastness to both.

(Request Item No. G-14)

5 Point Service on Paper Tubes

1. ENGINEERING SERVICE: Star, in cooperation with a leading paper mill, maintains a complete research laboratory to solve your problems.
2. HIGHEST QUALITY: Star Tubes are produced on the newest and most modern equipment and all work is held to highest standards.
3. A FULL LINE: Star can produce 99.44% of the many types of tubes used by textile mills.
4. THREE COMPLETE PLANTS, conveniently located. Each is equipped to produce the full line of Star Tubes.
5. FAST FAST SERVICE: Star carries large paper stocks at all three plants and has two financially affiliated paper mills which carry reserve stocks for immediate use.

For QUALITY and ECONOMY let your Star representative demonstrate "Five Point Service" soon.

There's a STAR tube, core, carrier or board for:
Weaving * Finishing * Yarn Processing * Shipping & Handling

Star PAPER TUBE, Inc.

ROCK HILL, S.C. • Phone 2026
Danville, Va., • SW 3-6379
Austell, Ga., • Phone 5338

For the Mill Bookshelf

Chemicals From Corn

A new 4-page folder titled "Chemical Products From Corn" is available from the Corn Products Division of the Corn Products Sales Co., New York City. Properties, types and current and suggested uses for Argo brand methyl glucoside, polyoses, zein, glucuronolactone, inositol, phytic acid, and sodium phytate are described.

(Request Item No. G-15)

Steel Strapping Tensioners

Its full line of air-powered steel strapping tensioners and sealers is detailed in "Signode Air-Power Tensioners and Sealers," a new folder from Signode Steel Strapping Co., Chicago, Ill. Featured are 8 tensioners, adjustable to supply uniformly the exact strap tension desired from 750 to 3,300 lbs. (at 90 p.s.i.), and seven pistol grip and double handle sealers. Half the folder is devoted to illustrated application stories of the tools in actual use. Comparative specification charts and individual descriptions included enable the manufacturer to select the ideal combination of air-power tools.

(Request Item No. G-16)

Dyeing Synthetic Fibers

A revised, expanded and up-to-date edition of the booklet, "Dyeing Synthetic Fibers," is now available from the dyestuff and chemical division of General Aniline & Film Corp., New York City.

This 86-page brochure contains material relating to the most important man-made textile fibers now commercially available, including several recently introduced brands, as well as data on significant blends of natural and synthetic fibers. Each different fiber is discussed in a separate chapter, giving brand name, chemical type, physical and chemical properties, and end uses.

Each fiber brand, as well as its blends in common use, is described in terms of dyeability, fabric properties and color fastness that may be expected. Listings are given of

the most suitable dyes produced by General Aniline's dyestuff and chemical division for use in each instance. The dyes are described by class, end-use suitability and trade name.

Each chapter in the brochure is said to go into considerable detail on the types of dyes (such as disperse, cationic, acid, azoic, etc.) used on the fiber, and to discuss working techniques for practical dyehouse application.

Reference lists at the end of the booklet give trade names of fibers and chemicals referred to and identify them with their manufacturers. (Request Item No. G-17)

Speed Variator

Information and data on General Electric's new general purpose Thymotrol speed variator, including details of standard and optional features, are contained in a new bulletin GEA-7018. The 8-page booklet describes the adjustable speed drive which uses the Thyratron tube to convert a.c. to d.c. power. Suitable control is included in the panel to vary armature voltage and thus motor speed over a wide, stepless range. Direct current motors used with these drives are specially designed to give maximum performance on rectified power.

The Thymotrol drives described in this booklet are of the general-purpose type—so called because they include the essential features to make them suitable for a wide range of applications at minimum cost.

(Request Item No. G-18)

Materials Handling Safety Kit

A plant safety kit aimed at making materials handling operations safer and more efficient in production, storage and shipping areas, by reminding workers of correct operating procedures related to the use of fork lift trucks, is again being released by Towmotor Corp., Cleveland, Ohio.

The complete Towmotor safety kit contains a pocket-sized "Lift Truck Operator's Guide"; four humorous safety cartoons designed for posting on plant bulletin boards;

POSITIVE, UNIFORM



with the NEW

FABRIONICS UNA-MAG

UNA-MAG GIVES YOU UNIFORM TENSION that means higher quality yarn in warping, spinning, winding, knitting, etc.

UNA-MAG DESIGN PERMITS INSTANT TENSION ADJUSTMENT to as much as 100 grams above the weight of the top disc. Tension can be adjusted on each yarn and separately or on more than 1,000 ends simultaneously by merely resetting a dial. Tension can also be varied to compensate for the varying distances the yarn travels. UNA-MAG IS EASILY INSTALLED on any disc-type tension device and the simplicity of operation helps minimize yarn damage caused by roughened and worn contact surfaces.

UNA-MAG IS FLEXIBLE. When you shift from any size yarn or cord to any other size, you simply reset a dial on the Una-Mag to maintain constant tension.

UNA-MAG IS SELF CLEANING. The precision construction of the Una-Mag permits a continuous spinning action on the top disc which prevents the accumulation of grease, dirt, etc. This means fewer maintenance problems and less down time for cleaning or adjusting.

Write for complete details on how FABRIONICS UNA-MAG'S uniform yarn tension control can save you time and increase your profits.

FABRIONICS CORPORATION
Box 521 • Huntington, L.I., N.Y.



Carolina Brush Co.

Manufacturers — Designers — Repairers

Textile Brushes

CHARLOTTE, N. C.

P. O. Box 3387

ED 2-5839

GASTONIA, N. C.

P. O. Box 588

UN 5-2422



FOR THE MILL BOOKSHELF

and four large lift truck route posters—each of which displays a different message of caution regarding narrow aisles, blind corners, dangerous crossings and low headroom areas.

The Towmotor operator's guide outlines basic operating data for Towmotor fork lift trucks and accessories, shows proper handling techniques for lifting, transporting and stacking various types of loads—procedures designed to prevent carelessness, help lift truck operators avoid costly accidents, eliminate personnel injuries and product damage.

The booklet includes a 30-point safety checklist containing courtesy rules, traffic-control tips and common sense safety precautions. It also contains a 32-point preventive maintenance checklist designed to cut plant downtime, assure trouble-free operation and get maximum service from Towmotor materials handling equipment.

(Request Item No. G-19)

Advantages Of Poly-V Drives

Design advantages of Poly-V belt drives are outlined in a new 4-page engineering service booklet available from Dayton Industrial Products Co., Melrose Park, Ill.

Illustrations show how single unit design of the Poly-V belt provides twice the tractive surface per inch of sheave width and can deliver up to 50% more power in as little as 2/3 the space, compared with conventional belt drives.

The booklet, No. A2343, outlines specifications for Dayton Poly-V drives relative to in-operation characteristics of vibration, sheave diameters and speed ratios, and features condensed horsepower rating tables on J, L and M section Poly-V belts. Complete sheave groove dimensions are listed.

(Request Item No. G-20)

Liquid Level Gages And Valves

New 8-page catalog No. 376 from Jerguson Gage & Valve Co., Burlington, Mass., covers almost the complete line of Jerguson liquid level gages and valves with a condensed presentation of the most pertinent data and specifications. It covers standard and special function gages and valves. Included are dimensional drawings, photographs, construction features, pressure-temperature graphs and ratings, materials, and a comprehensive table of sizes, specifications and standard and optional features.

(Request Item No. G-21)

Creslan Data

A technical data bulletin describing the physical properties and performance qualities of Creslan acrylic fiber has been issued by the fibers division of American Cyanamid Co., New York City. The new fact file supplements the company's technical information bulletins on Creslan and its processing.

Included in the new bulletin are a rundown of basic properties, a stress-strain chart, and descriptions of the texture characteristics, processability, dyeability and washability of Creslan.

(Request Item No. G-22)

All-Purpose Softener

Detailed information on the versatile application of Softener A, a new softening agent developed by the W. F. Fancourt Co., Philadelphia, Pa., for broad distribution is now available from the company.

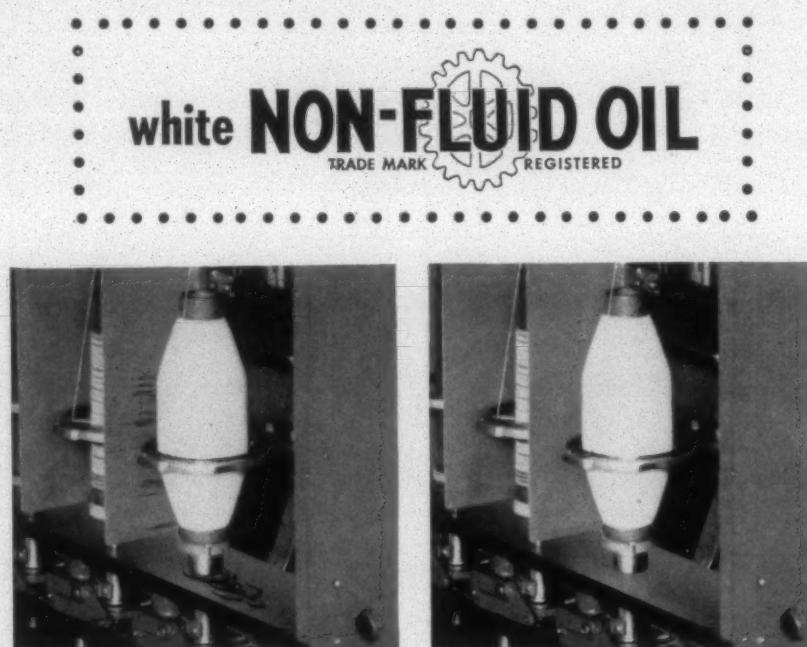
The new softener is said to be adaptable for use on any type of fiber or fabric and applies fullness, softness and body to piece goods, knitgoods, stock or yarn. It is suitable for treating bleached, dyed or printed textiles.

Softener A is said to offer good resistance to yellowing at high temperatures or during long storage periods. It gives lubricity to dyed yarns, and will not adversely affect the light fastness and shades of any dye-stuffs. It may be used alone or in combination with other finishing materials.

(Request Item No. G-23)

A.C. Motor Catalog

A new comprehensive motor catalog dealing with its a.c. multi-shielded motors has been published by Sterling Electric Motors, Los Angeles, Calif. The 56-page publication



Ordinary ring oils blacken yarn, cause loss of production

White NON-FLUID OIL does not spread out on rails to spatter bobbins. It stays on rings and lubricates effectively. This eliminates blackened yarn, reduces broken ends to a minimum; or more simply, it increases your output per frame.

White NON-FLUID OIL adheres to wearing surfaces. Its exceptionally high lubricating properties and tenacious nature keep travelers running almost friction-free. This reduces the pull at high speeds, resulting in fewer broken ends, and a yarn of more uniform quality.

White NON-FLUID OIL is neutral; it does not become gummy; therefore, it lasts longer on wearing surfaces than petrolatum, liquid oil or ordinary ring greases. And you effect still another saving! Fewer applications and less lubricant are needed.

Send for free testing sample of white NON-FLUID OIL and Bulletin T-16. You'll be amazed at the difference.

NEW YORK & NEW JERSEY LUBRICANT CO.

292 MADISON AVE., NEW YORK 17, N. Y.

WORKS: NEWARK, N. J.

Sou. Dist. Mgr.: Fred W. Phillips, Greenville, S. C.

WAREHOUSES:

Atlanta, Ga.
Greensboro, N. C.
Springfield, Mass.

Birmingham, Ala.
Greenville, S. C.
Chicago, Ill.

Charlotte, N. C.
Detroit, Mich.

Columbus, Ga.
Providence, R. I.
St. Louis, Mo.

NON-FLUID OIL is not the name of a general class of lubricants, but is a specific product of our manufacture. So-called grease imitations of NON-FLUID OIL often prove dangerous and costly to use.

includes complete pricing and dimensional data on motors of this type, ranging from $\frac{1}{4}$ to 200 h.p. Information is included for various modifications, such as specialized mountings and enclosures, as well as the new Sterlicone Multi-Shielded drip-proof motors. A special section of the catalog deals with motor selection and application. (Request Item No. G-24)

Catalog Of Testers

Catalog No. 60 from Custom Scientific Instruments Inc., Kearny, N. J., contains illustrations and brief descriptions of 77 testers or equipment manufactured as standard products. These units are grouped under the following headings: abrasion testers; biological and scientific equipment; flammability-ignition tester; production, control and research equipment; thermal conductivity dielectric units; and thickness compression and recovery gages.

The catalog points out the ability of the company to custom build testers or equipment of all types for individual and general need. (Request Item No. G-25)

U. S. Testing Co. Facilities

United States Testing Co. has published a brochure describing its textile laboratory facilities for analysis, research and development, and inspection of fibers, yarns, fabrics (including woven, nonwoven and knitted), apparel and industrial fabrics. The booklet describes technological facilities of the textile division's five major laboratories: physical testing; chemistry and dye evaluation; wash-and-wear evaluation; microscopy; and hosiery analysis. (Request Item No. G-26)

New Gear Hardening Method

Philadelphia (Pa.) Gear Corp. has published a booklet which fully describes its new method of hardening large gears and the advantages which can be derived from it.

Some basic advantages claimed for the new method are:

- (1) The ability to easily harden large gears.
- (2) Increased gear service life.
- (3) Increased strength horsepower rating.
- (4) Full contour hardened area eliminates stress concentrations.
- (5) Minimized distortions of hardened gear.
- (6) Prevents material failure and assures uniform hardening pattern.
- (7) Low-cost induction hardening can be applied efficiently to the largest gears using a plain carbon steel analysis.

The booklet fully illustrates and describes in detail the superiorities of the new gear method. (Request Item No. G-27)

Fiber Primer

A "Fiber Primer" for use as a guide to the current labeling of textile products has been issued by the fibers division of American Cyanamid Co., New York City. The

Does YOUR Warper have . . . • DENSITY CONTROL? • UNIFORM SPEED CONTROL?

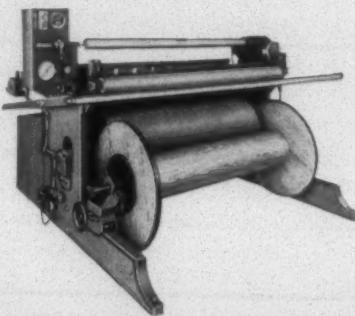
ALLEN MODEL "G", the modern warper with
PATENTED HYDRAULIC CONTROL, gives you:

Uniform Density of Warp throughout entire build-up.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure at all times between the beam surface and the pressor roll which drives the beam. The nip between this roll and beam is always at same distance and angle, so yarn tension is kept uniform. HARD-SHELL, SOFT-CENTER WARPS ARE POSITIVELY ELIMINATED.

Controlled Uniform Yarn Speed, variable at will.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure between beam surface and driving roll, assures positively uniform yarn speed—free from the abrupt jumps in speed experienced with now obsolete methods of constantly adjusting the drive speed in an endeavor to compensate for warp build-up. In addition, ALLEN VARIABLE SPEED DRIVE enables the operator to SELECT EXACTLY THE RIGHT SPEED FOR THE YARN BEING RUN. This means your ALLEN warper is always adjusted for MAXIMUM production consistent with QUALITY.



Don't put up with old-style warping!

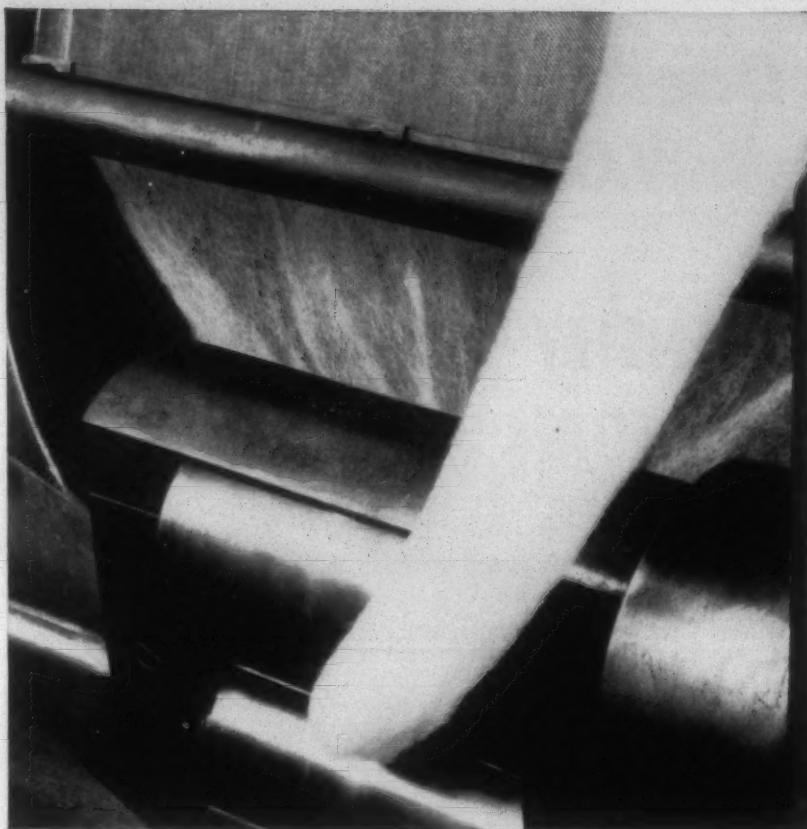
Put this modern warper concept to work along with your other modern equipment. Time-proved, patented,—no other warper has these features.

REQUEST "MODEL G BROCHURE."

Allen Company, Inc., New Bedford, Mass., U.S.A.

ALLEN MODEL "G"

World's Most Advanced High Speed Warper



Booth METALLIC

Super Precision Metallic Wire

Years of investigation, research and mill study have resulted in the selection and development of Booth Metallic.

Booth studied all metallic wire available the world over, including types produced in Russia. In leading foreign mills with outstanding production records—Graf metallic wire was always the first choice.

Modifying this wire to the needs of American mills, Booth now offers a wire that is milled rather than punched, providing absolute uniformity of tooth shape and height with complete freedom from burrs. Even temper of Booth Metallic eliminates broken teeth and the super hard points prevent premature dulling. This superior wire costs no more than other makes.

A Booth representative can help you achieve the best in carding performance.

BENJAMIN BOOTH COMPANY
ALLEGHENY & JANNEY STS., PHILA. 34, PA.

Sales Offices: Charlotte, N.C.—Richard Hurley • Philadelphia, Pa.—Norman F. Bush—REgent 9-8989
Greenville, S.C.—Hurley & Harrison • West Point, Ga.—Charles G. Stover • Lowell, Mass.—William Gill

QUALITY CARD CLOTHING
SINCE 1892

Booth

FOR THE MILL BOOKSHELF

division markets Creslan, newest of the acrylic fibers.

The publication lists the official generic terms used in identifying natural and man-made fibers under the Textile Fiber Products Identification Act of 1960 and the Wool Labeling Act of 1939. Also listed are the principal fiber trademarks in each generic class, the basic performance properties of each class, and the most important applications for each fiber group in apparel, home furnishings and industrial products.

(Request Item No. G-28)

Pictures Of The Past

A collection of pictures featuring the textile industry of the 1500s to the 1800s is on display at the Gallery of J. H. Villard Inc., New York City.

The subjects represent spinners, weavers, dyers, knitters and many other textile craftsmen as they did work in past times. A free descriptive catalog is available.

(Request Item No. G-29)

A.S.T.M. Textile Publications

Six publications relating to textiles are listed in the latest list of publications from the American Society for Testing Materials. Two new items are included in the list. They are:

Compilation of Standards on Textile Materials. Contains 134 standards relating to textile fibers, yarns, threads, hosiery, carpets, etc. Included are new test methods for differential dyeing of cotton, shrinkage in laundering, thermal transmittance of textiles, and tufted floor covering. This supersedes the 1958 edition. 932 pages. Paper cover, \$8.50; to A.S.T.M. members, \$6.80.

Neps In Cotton Fibers. The comparison is a positive film photograph (8½x11") enclosed in a plastic envelope. Single copies \$6.

Other items included in the list are:

A Technology for the Analysis, Design and Use of Textile Structures as Engineering Materials by Walter J. Hamburger, director of Fabric Research Labs. 56 pages. Paper cover, \$1.50; to A.S.T.M. members, \$1.15.

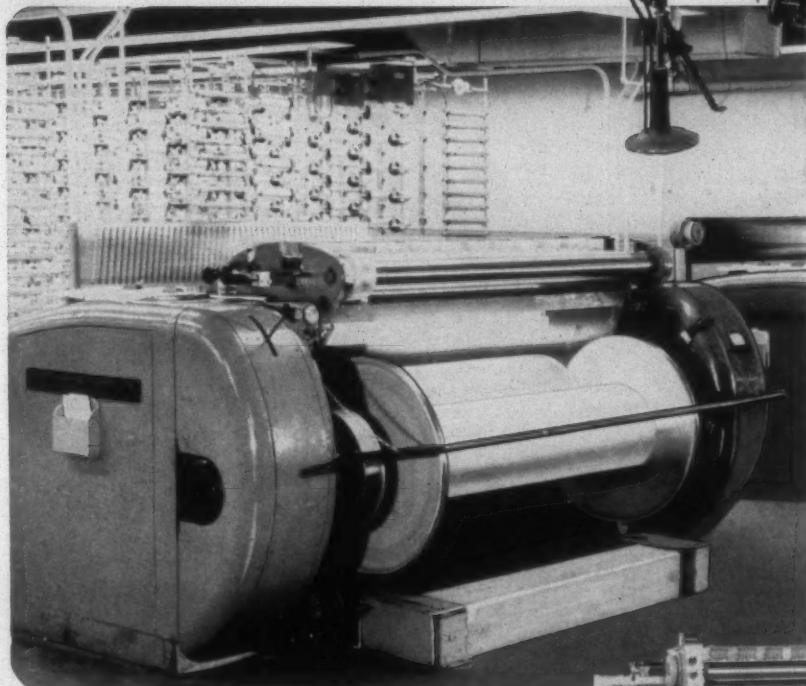
Textile Fibers — An Engineering Approach to an Understanding of Their Properties and Utilization by Harold Dewitt Smith, textile technologist, The A. M. Tenney Associates Inc. 64 pages. Paper cover, \$1; to A.S.T.M. members, 25 cents.

Cotton Yarn Appearance Standards, a series of photographic prints for use in connection with the A.S.T.M. Methods of Testing and Tolerances for Cotton Yarns. There are five sets with four photos in each. Each set \$7.50, postage prepaid.

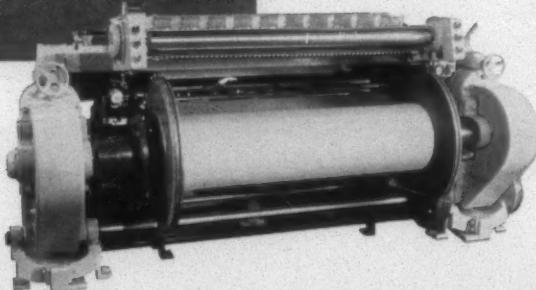
Definitions and Glossary of Terms on Textile Materials. Self cover, 60 cents to members and non-members.

The items can be obtained directly from the American Society for Testing Materials, 1916 Race St., Philadelphia, Pa.

U



760
Since
1950

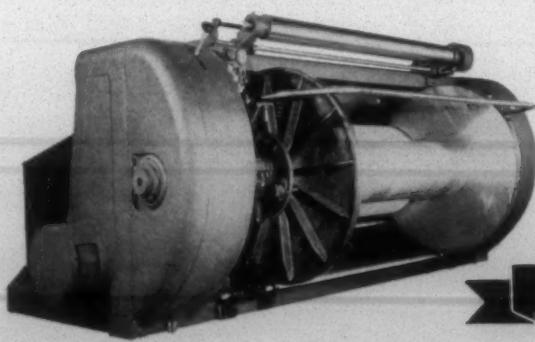


U
cker

... has installed over 760 warpers since 1950—approximately three times the volume of the next leading make. Speed, flexibility, economy, and many valuable exclusive features account for this outstanding popularity—from finest deniers to heaviest tire cord yarns.

Accurately maintained air operated pressure produces beams of any desired density, from hardest beams for extra hours of weaving to soft beams for perfect dye penetration. Speed and braking are rheostat controlled from both ends to provide smooth operation and instant stops at all speeds. Horizontal traverse on combs prevent channeling. Other features, such as air doffing, predetermining counter clocks, and electric speed indicators are standard on most models. Heavy construction practically eliminates vibration.

Whatever your warping requirements may be, there is a Cocker Machine which will do the job faster and better. Let us give you full information on the type you need.



Machine and Foundry Co., Gastonia, N. C.

WORLD'S LARGEST DESIGNERS AND BUILDERS OF COMPLETE
WARP PREPARATORY EQUIPMENT

Serving The Textile Industry

Watson Williams Sells Massachusetts Facility

Watson Williams Mfg. Co., Millbury, Mass., has sold its Millbury plant to The Felters Co., producer of felt cloth in Millbury. The sale is in preparation for Watson Williams' move to Pinebluff, N. C., in August. The plant employed about 100 persons at peak operations but had only about 55 on the payroll at the time of the sale announcement. The plant was assessed for \$30,000.

Chemstrand Chooses Cadon As New Nylon Yarn Name

The Chemstrand Corp., New York City, has announced the choice of Cadon as the name for its new multi-lobal nylon yarn. The multi-lobal shape of the fiber cross-section, which differs from the traditional round nylon filament, reflects light outwardly in such a way as to impart a desirable luster to the yarn and fabrics made from it, Chemstrand reports.

Cadon is said to have application in woven goods for home furnishings, apparel and industrial fabrics. The yarn is also said to offer an increased range of fabric and styling effects for nylon.

Fabrics of Cadon are said to possess a luxurious hand and resilient texture with quick recovery. The yarn's superior covering power, as opposed to that of round cross-section nylon, permits greater opacity that makes possible lighter weight fabrics. The multi-lobal yarn also achieves greater wicking performance, particularly advantageous in apparel fabrics.

Mill Factors Corp. Expands Into Florida

Mill Factors Corp., New York City, commercial financing and factoring organization, has announced its latest expansion into the Florida area.

The company will begin serving the Greater Miami area and southern Florida from its new regional offices in Miami.

Adell Chemical Becomes Lestoil Products Inc.

The Adell Chemical Co., Holyoke, Mass., became Lestoil Products Inc. recently as final papers were signed closing the sale of Adell and its several subsidiaries to the new corporation. The stockholders of Lestoil Products Inc. include Standard International Corp. of Andover, Mass., its owners and

associates thereof. Sale price and terms of the contract were not disclosed. It is reported that 1959 sales of Adell Chemical were approximately \$25 million.

Du Pont Receives Patent On Tri-Lobal Synthetic Fibers

The Du Pont Co., Wilmington, Del., has been issued U. S. Patent No. 2,939,201, covering the production of synthetic fibers having a tri-lobal cross section. Tri-lobal fibers impart to fabrics a distinct three-dimensional luster and feel, plus greater opacity and cover, Du Pont reports.

Du Pont already has in commercial production four products covered by the patent. These are: Antron Type 560 nylon, used in apparel; Type 90 nylon, used principally in tricot and hosiery; Type 501 nylon, used in rugs and carpets; and Dacron Type 62 polyester fiber, used widely in women's blouses, dresses and sportswear.

Du Pont's tri-lobal cross-section fibers first appeared on the market commercially in 1959, a result of Du Pont efforts to develop fiber forms which would add new dimension to fabric styling and broader fabric uses.

Refined Products Opens Two Southern Sales Offices

Refined Products Co. of Lyndhurst, N. J., producer of specialty processing chemicals used in textile finishing, has announced the establishment of sales offices in Charlotte, N. C., and Columbus, Ga. In addition to complete sales facilities, a fully-equipped application and research laboratory and warehouse have been completed in Charlotte. George H. Fine will supervise the laboratory.

Frank J. Anderson Jr. and Walter C. Comer Jr. have been named sales representatives for the Charlotte office. Thomas A. Davis will continue to represent the company in the Columbus area.

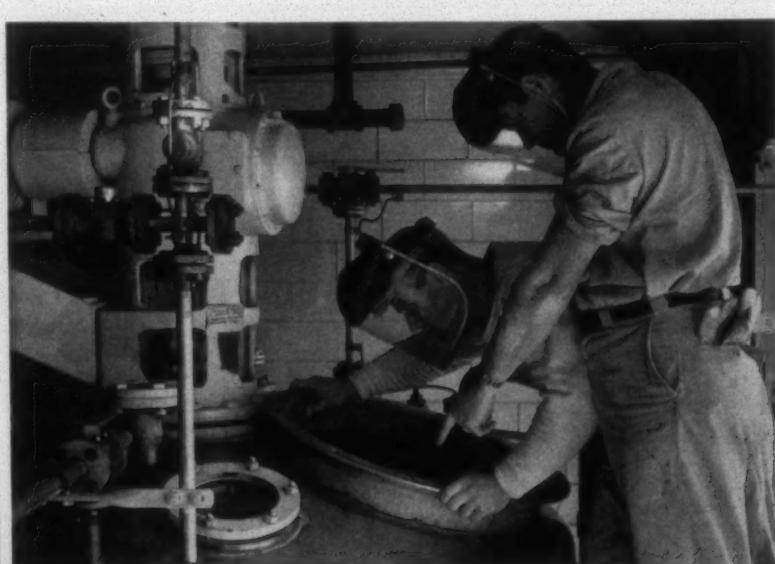
Curtis & Marble Purchases J. E. Windle Machine Works

The Curtis & Marble Machine Co., Worcester, Mass., has purchased the J. E. Windle Machine Works of North Grafton, Mass. Windle has produced cloth finishing, double winding and measuring machines since 1883.

Windle will move from North Grafton to Worcester in the near future. It will continue to manufacture parts for existing equipment.

Warner & Swasey Opens New Ohio Research Center

The newly completed 40,000 square foot research center of The Warner & Swasey Co., located in Solon, Ohio, is now fully



A NEW PILOT PLANT FACILITY to speed development of modified starch products for the textile industry has been put in operation by the A. E. Staley Mfg. Co., Decatur, Ill., corn, soybean and chemical processor. A miniature starch processing plant built to scale of full-size production equipment, the new pilot facility develops process data on research laboratory findings and produces semi-commercial quantities of new starch products for market development use. Automatic control instruments regulate the small scale process equipment, including stainless steel reaction tanks, filter, dryer, mixer, sifter and storage units, each duplicating commercial equipment in miniature. The pilot plant has a capacity output of up to 12,000 pounds daily, and provides greater speed, flexibility and precision control in developmental research and semi-commercial production.

Dillard
brings a new idea
in packaging . . .

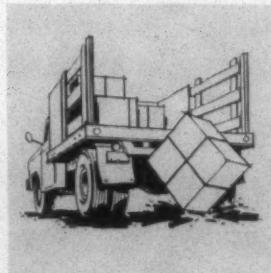
AVISTRAP*

Cord Strapping

AVISTRAP* offers new advantages in industrial packaging

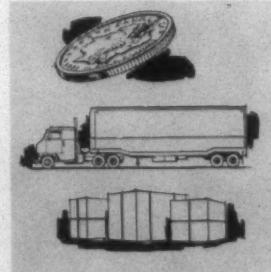
Super strength

Avistrap cord strapping is a radically new material made from super strength Avisco rayon. Now available from Dillard. Outperforms steel in impact resistance.



Economy

Avistrap cord strapping gives more strap per dollar than steel. Greatly reduces shipping costs since it weighs from 1/7 to 1/4 as much as steel strap of same width.



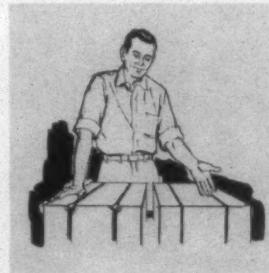
Safety

Avistrap cord strapping has no sharp edges, cannot cut hands. When overtensioned, does not lash out. No disposal problem . . . easy to handle and can be burned.



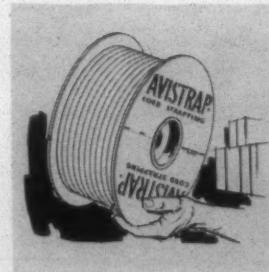
Reduces damage

Avistrap cord strapping is highly flexible, tightens around corners without cutting cartons. Properly tensioned, it cannot harm merchandise. It will not rust.



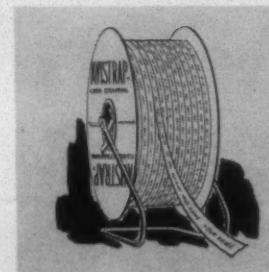
Fast, easy handling

Avistrap cord strapping coils weigh about 21 pounds, complete with disposable spool. Can be changed in seconds. Just throw away empty spool, put new coil in place.



Low cost imprinting

It costs less to imprint Avistrap cord strapping with name than to imprint steel strap. Your Dillard representative will help you plan imprint style.



*Trademark of American Viscose Corporation. Patents pending.

Dillard
PAPER COMPANY

GREENSBORO • CHARLOTTE • RALEIGH • WILMINGTON • WINSTON-SALEM
ATLANTA • MACON • AUGUSTA • GREENVILLE • COLUMBIA • ROANOKE
SPARTANBURG • BRISTOL • KNOXVILLE • BIRMINGHAM

SERVING THE TEXTILE INDUSTRY—

staffed and in operation. The new facility more than doubles the space available to the company for its research and development work. The center is designed to bring together, in so far as practical, all research and development activities and personnel of the company for greater efficiency and economy. In addition to textile machinery, the center will handle earth-moving equipment design and test work, and machine tool development projects.

National Vulcanized Fibre Foresees Continued Growth

National Vulcanized Fibre Co., Wilmington, Del., expects to increase current production 33% by 1964, with sales of \$32 million and earnings at least \$3.25 per share on an increased number of shares, President Eugene R. Perry told members of the New York Society of Security Analysts June 13.

In achieving expansion, National does not anticipate additional capitalization but expects to reduce its current debt and maintain capital expenditures from depreciation and retained earnings, Perry said.

For 1960, Perry predicted National sales would continue "at the same rate as last year," with earnings in the range of \$2.50

plus "allowing an opportunity for further dividend improvement when fit."

The Wilmington firm posted record sales and earnings in 1959. Net earnings were \$1.8 million. Net sales climbed sharply to \$24.2 million from \$16 million in 1958. For the first quarter of 1960, National reported net earnings of \$492,047. on sales of \$6.7 million.

Proctor & Schwartz Moves Reclothing Plant To N. C.

Proctor & Schwartz Inc., Philadelphia, Pa., has transferred its Spartanburg, S. C., branch service and reclothing shop facilities to a new modern production plant in Lexington, N. C. The new plant is now manufacturing textile machinery and will also offer new and improved facilities for reclothing service, Bi-Temp wire, and a branch sales office.

Veeder-Root To Emphasize Electronic Applications

New developments in the application of electronic counters will be the subject of a technical assistance program recently announced by Veeder-Root Inc., Hartford, Conn.

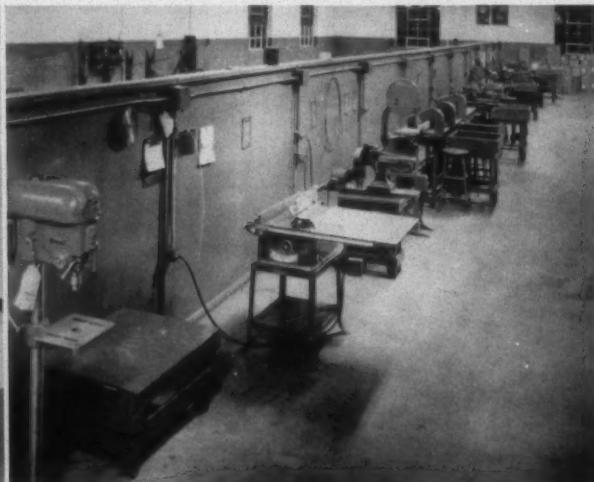
First phase of the program will be a training symposium for Veeder-Root elec-

tronic counter specialists. This will be followed by a schedule of demonstrations to assist industry in the proper application of electronic counters and actuation devices, particularly where increased counting speed, accuracy and flexibility is required. The program was developed as a result of requests for more information on capabilities of electronic counting and the related subjects of automatic predetermining control and counting systems design.

Crompton & Knowles Sees Improved Sales And Earnings

Crompton & Knowles Corp., Worcester, Mass., expects substantially improved sales and earnings for the first six months of 1960 compared with first-half 1959. Preliminary estimates for 1960 place earnings at \$1.3 million on sales of \$14 million. Earnings for the same period a year ago were \$592,322 on sales of \$10.5 million.

Frederic W. Howe Jr., C&K president, reports the company is continuing to look for growth in foreign markets. A licensing arrangement was recently completed for the manufacture of C&K's woolen and worsted W-3 looms by a Japanese firm, Hiraiwa Iron Works Ltd., Hekinan City, Japan. The arrangement is similar to one made about a year ago with Societa Nebiolo in Turin, Italy.



Armstrong Cork Co.'s new textile facility in Pleasantburg Industrial Park, Greenville, S. C., boasts modern new sales offices and production quarters. J. V. Ashley is manager of the new facility.

Armstrong Cork Co. In Shiney New Quarters

THE Armstrong Cork Co. is now serving the Southeastern textile industry from new facilities housed in a modern one-story brick structure located in Pleasantburg Industrial Park at Greenville, S. C.

The new combination plant and district sales office covers 18,000 square feet of floor space and includes greatly expanded warehousing and shipping areas, a large roll shop, a cot making department, and an air-

conditioned office area with direct wire service to Armstrong headquarters in Lancaster, Pa.

Among the many features of the new facilities is an off-street parking area for more than 40 cars which can be expanded to double this size in the future. An easily accessible truck docking area is located along the side of the building in a separate area to make possible swift loading and unloading.

Armstrong has been a major supplier of spinning roll covers and other textile machinery supplies since 1915. Today the company's line includes Accotex roll coverings, Accotex aprons, clearer coverings, loom take-up roll coverings, loom press roll coverings, loom binder covers, and other weave room and mill supplies.

Victor Mill Starch



IF HE'S A
KEEVER MAN
HE'S THE
WEAVER'S FRIEND



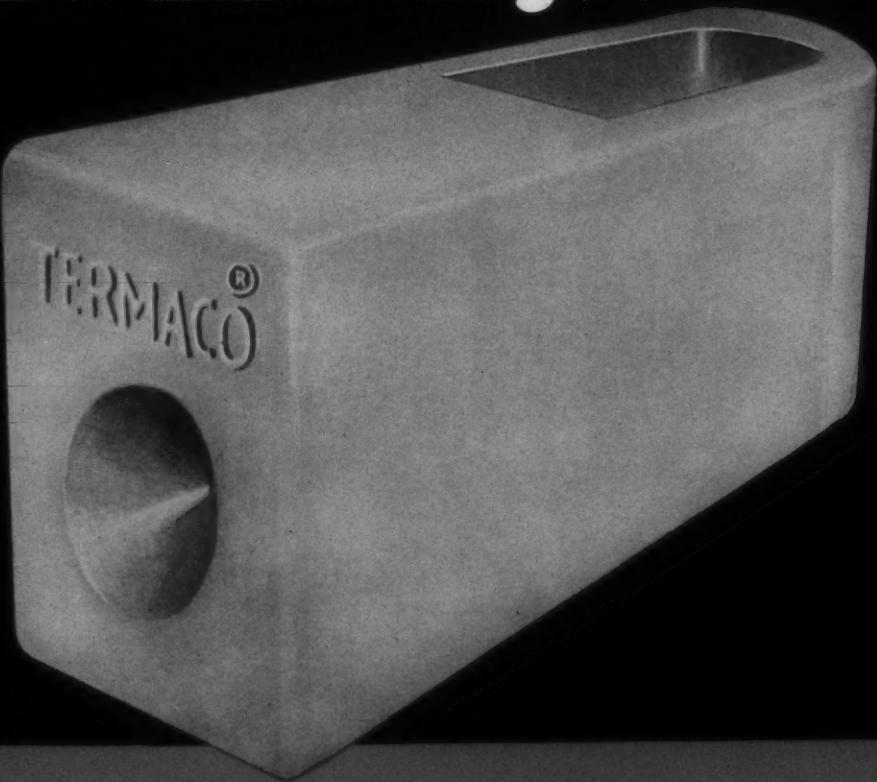
There is no substitute for
uniformity and Keever Service

Charles C. Switzer, Vice President
TEXTILE SALES DIVISION
118 SOUTH PLEASANTBURG DRIVE
GREENVILLE, SOUTH CAROLINA

THE KEEVER STARCH COMPANY • GENERAL OFFICES • COLUMBUS 15, OHIO

Processors of corn, wheat and blended starches for industry since 1898

YOU CAN PAY MORE
but you can't buy better



**The
AMAZING ACCEPTANCE of TERMACO**

Light colored Picker is based on

- ★ PREMIUM PERFORMANCE
- ★ LOWER COST
- ★ OUTSTANDING RUNNING QUALITIES

MADE BY DENMAN RUBBER MFG. CO.
WARREN, OHIO

THE TERRELL MACHINE COMPANY, INC.

Post Office Box 928

3000 South Boulevard

CHARLOTTE, NORTH CAROLINA

textile bulletin

VOL. 86

JULY 1960

NO. 7

More Than 15,000 Visitors Throng The A.T.M.A. Parade Of Progress

MILL MEN from 34 states and 46 foreign countries flocked to Atlantic City, N. J., the week of May 23-27 for the American Textile Machinery Association's "Parade of Progress." Total registration was in excess of 15,000. Included in this figure are the following "with purchasing influence" visitors:

Presidents, Vice-Presidents, Secretaries, Treasurers, Owners, Partners	2,077
General Managers, Superintendents, Controllers, Assistant Superintendents, Assistant Managers	2,707
Purchasing Agents	120
Foremen, Overseers, Supervisors	911
Master Mechanics, Plant Engineers, Electricians	657
Loomfixers	20
Designers	60
Chemists and Colorists	83
Directors of Research	24
Technicians	108
Production Managers	49
Quality Control Supervisors	79
Miscellaneous Supervisory Classifications	570

Broken down by states, official registration lists show:

Alabama	61	Missouri	12
Arkansas	7	New Hampshire	97
California	11	New Jersey	646
Colorado	1	New York	762
Connecticut	187	North Carolina	853
Delaware	92	North Dakota	1
Florida	20	Ohio	38
Georgia	270	Oregon	13
Illinois	24	Pennsylvania	1,142
Indiana	6	Rhode Island	274
Kentucky	11	South Carolina	457
Maine	97	Tennessee	102
Maryland	58	Texas	13
Massachusetts	553	Vermont	5
Michigan	16	Virginia	166
Minnesota	7	West Virginia	19
Mississippi	8	Wisconsin	24

Giving the show a truly international flavor were visitors from the following countries:

Argentina	121	Brazil	39
Australia	13	Canada	361
Austria	3	Chile	17
Belgium	12	China	4
Bolivia	3	Colombia	56

Costa Rica	1	New Zealand	2
Cuba	11	Norway	1
Ecuador	5	Nova Scotia	4
Egypt	10	Pakistan	4
England	51	Paraguay	2
Finland	3	Peru	13
France	31	Puerto Rico	3
Germany	152	Philippines	8
Guatemala	4	Portugal	7
Holland	15	Russia	6
India	15	San Salvador	5
Iran	1	Scotland	1
Ireland	1	Spain	6
Israel	5	Sweden	13
Italy	113	Switzerland	22
Japan	123	Thailand	2
Korea	5	Uruguay	3
Mexico	120	Venezuela	15

FOLLOWING UP our pre-show review of machinery and equipment displayed at Atlantic City (T. B., May '60), this month's issue describes further highlights of the show.

Opening, Picking, Carding

The James Hunter Machine Co. displayed its Model AN bale blender for the first time at the exhibition. Designed as a complement to Hunter's Fiber Meter blending systems, the Model AN automatically feeds small tufts of cotton or other type fibers from all bales laid down behind each Fiber Meter. The company reports increases in break factor of 16.5% and reduction in ends-down-per-thousand-spindle-hours of 9.6% from use of the Fiber Meter blending system. Staple spinning mills are also reported to be making big savings in blending room labor with the equipment.

Platt Bros. Sales Ltd., Oldham, England, represented by Atkinson, Haserick & Co., demonstrated its automatic picker lap doffer with Long pneumatic lap control system. The new unit has diaphragm type cylinders acting on the calender rolls giving a pressure on each end of the rollers of up to 4,750 pounds. Two double-acting, long stroke cylinders apply pressures of up to 1,100 pounds to each end of the lap roller. This pneumatic weighting is said to be constant throughout the whole build and makes possible the production of laps of about 23 inches in diameter containing up to 100 pounds of material. Uniform lap roll pressure and the elimination of the "stick-slap" characteristic



The Crosrol web purifier was shown in operation on a Platt card. The device crushes seed and leaf particles left in the web after carding so that they fall out in later processing.

of the orthodox brake unit are said to improve considerably the yard-to-yard regularity of the lap.

Actual pressures employed can be varied over a wide range, enabling different types of fiber to be processed satisfactorily. The automatic lap doffer is electro-pneumatically controlled and actuated by a "hunting tooth" type knock-off. Operating through the usual cycle, the doffer discharges the full lap, takes a new lap roller and automatically wraps the cotton sheet around the roller without interruption to the normal flow of the material. The electrical control panel for starting and stopping the picker incorporates inching circuits, a feature designed to be of particular use in preventing undue waste when passing the lap sheet through the calender rolls.

The doffing and threading mechanisms are said to be simple and to require little attention or maintenance. Flow valves control the synchronization of the lap threading mechanism with the movement of the oncoming sheet of cotton. A hinged lap tray facilitates full lap removal.

Trutzschler & Co. displayed an automatic bale plucking machine designed to open bales mechanically into small single tufts and to mix these on the conveyor belt which collects the tufts. When the bale is put on the plucker it runs alternately backward and forward. This movement is



Keynote speaker at official opening ceremonies for the A.T.M.E. was North Carolina's Governor Luther Hodges, shown here being presented a sealed replica of a Civil War field piece by John Foard of Klutts Rings Inc., Gastonia, N. C., one of the show's exhibitors.

A. T. M. E.

controlled by two terminal switches. The plucking devices, which consist of two rows of springs, dig into the bale from below, pulling out fine tufts of cotton which are dropped onto a conveyor belt placed under each group of pluckers.

The company also displayed a complete picker line consisting of condenser, hopper feeder, beater and lap machine with automatic doffing device, electronically synchronized with pneumatic calender rolls for obtaining laps of 70 pounds.

Also displayed was a picker line by Trutzschler with an electric control device for a complete opening installation. The pickers are equipped with high pressure motion for the calender rollers of a maximum pressure of 2.3 metric tons on each side, which means a total of 4.6 tons, for producing laps of up to 30 kg. in weight and 75 m. in length. Automatic lap doffing arrangement and the pneumatic pressure motion of the rack heads are also provided.

The speed of the feed roller and the feed lattices of the picker are synchronized with the spiked lattice in the hopper feeder and is automatically controlled by the pedal regulation underneath the feed roller.

The Crosrol web purifying device produced by Carding Specialists Co., Yorkshire, England, was displayed by Atkinson, Haserick & Co. The web purifier is mounted on the card frame between the doffer comb and the calender rollers. It comprises a pair of precision ground, hardened steel rollers between which is passed the full width of the web. Trash, seed and leaf particles left in the web after carding are crushed and fall out during subsequent processing.

The Model D super carding device made by Daiwa Spinning Co. and sold in the U. S. by Edward S. Rudnick Associates featured two licker-ins and a carding rate of 20 pounds per hour. The first licker-in operates at 1,200 r.p.m. and the second at 450 r.p.m. Since it is possible to obtain a surface speed of the first licker-in higher than the



James Hunter's Model AN Multi-Tuft bale blower is designed to bring automation to the opening room.

A. T. M. E.

surface speed of the cylinder, opening and cleaning can be done at the speed suitable for the quantity fed from the feed roller. The second licker-in is hollow and has a perforated surface. Short fibers are sucked into the second licker-in's interior and discharged out of the machine. The quantity of dust and waste to be removed can be regulated by adjusting the position of the mote knife and under sheet, as well as by controlling the suction air volume of the fan. Conversion of conventional cards to the new system is said to be simple.

Drawing

The Model MDF.5 high speed draw frame was demonstrated by Platt Bros. Sales Ltd. of England, represented by Atkinson, Haserick & Co. The unit operates at normally recommended speeds of 300 to 420 feet per minute. It can be supplied as a single-head unit with two or four deliveries and the drive on the right hand side; or as a double-head unit with four deliveries each, and the drive on either the left or right hand side. Using normal coiling, the unit is available for cans 12, 14 and 16 inches in diameter and 36 inches long. It can also be arranged for bi-coiling in cans of 12 and 14 inches in diameter and 36 inches long. Cans 42 inches long can be accommodated, but this increases frame height.

Any of the following drafting arrangements can be applied on the unit: 2-over-3; 3-over-3; 3-over-4; and 4-over-4 with Shirley fluting and drafting dispositions. These various drafting systems allow the full cotton range of staples to be worked on the three or four-line arrangements and a full range of staples up to 2½ inches to be processed on the three-line arrangements.

For staples up to 1½ inches the conventional Shirley 4-over-4 or 3-over-4 drafting system can be supplied for all passages.

The front bottom line of drafting rollers is mounted in needle bearings to permit high speed running, while the more slowly revolving back rollers rotate in phosphor bronze bearings. Bottom draft roller diameters can be from 1 to 1½ inches, increasing in 1/8 steps, and vary according to staple length and the material being processed.

Since high speed drafting results in a quicker build-up of fly and waste, the unit has a rubber wiper for each top roller which is located immediately beside the suction nozzle. Strippings from the bottom rollers are removed by similar wipers and nozzles which are mounted so they can be swung away from the rollers for inspection and other purposes.

The unit features easy access to the gearing for roller settings and simple removal of fluted rollers for scouring.

Speeds of 350 to 650 feet per minute are cited for the Model ER two-head speed drawing frame demonstrated by Societe Alsacienne de Construction Mecaniques. Designed for cotton, short staple synthetics and blends, the unit has a drafting system composed of four fluted bottom rollers and four top rollers providing a two-zone drafting as follows: (1) a pre-drafting between the third and fourth roller, which can be set from 1 to 2; and (2) one main drafting between first and second roller which can be set



American Reiter cites speeds of up to and over 600 f.p.m. for its Model DO drawing frame.

from 4 to 8 with a maximum difference of 1% between two consecutive drafting ranges. Another feature of the drafting system is the large diameter of the delivery roller, 60 mm. which provides stability, true running and moderately revolving speed, despite high delivery.

Because of its reduced deliveries, the unit can be fed by means of large size cans, reducing the piecings, an important cause of breakages in preparation and spinning processes. The feeding device with positive driving parts for the slivers located above the cans avoids the detrimental friction of the material on the edges of the cans and the elongation which is especially to be avoided when processing combed cotton or synthetic fibers.

The slivers are deposited into the cans by means of closed funnel wheels, fitted on balls, insuring a perfect laying as well as a maximum sliver weight in the cans.

The F. M. drawing frame produced by Howa Machinery Ltd. of Japan was exhibited by Mitsubishi International Corp. running sliver of 65% Dacron and 35% combed cotton at a delivery speed of 400 f.p.m. and a production rate of 450 lbs./hr. The unit has two independent drafting



Warner & Swasey's pin drafter intersecting draw frame featured automatic doffing and the Servo-Drafter infeed levelling device.



Saco-Lowell describes its new 14x7 Rovematic roving frame as the "frame of tomorrow." Operating speeds are up to 1,200 r.p.m.

assemblies placed face-to-face, and one pair of calender rollers to enable fleece mixing. The ban-tube coiler is just below the calender rollers. As the fleeces are blended, they become one sliver in the vertical trumpet cover, which is drawn into the trumpet guide, and then delivered positively to the deposit hole of the coiler gear by a double apron.

Two individual drafting mechanisms being provided on the frame, a draft system and its range can be individually selected according to the kinds of materials, i.e., 4-over-5, 3-over-4, or even 4-over-4 drafting systems are possible for each draft assembly, and the draft ranges are from 4-to-8.

All bearing parts are equipped with anti-friction bearings to prevent overheating, vibration and wearing. Over-arm spring weighting for the top roller is said to result in easy operation and excellent stability of pressure on the top rollers while at high speed running.

The unit features automatic can displacing and sliver cutting. The can in the center position of the frame is rotated by the can table under the can guide, while the empty can is kept stationary. When a full can is indicated by the hank clock, the speed of the machine is reduced and the can guide slides to the right or to the left, replacing



Whitin introduced its new 14x7 roving frame designed for flyer speeds up to 1,200 r.p.m.

A. T. M. E.

the full can. While the full can is sliding by the can guide, the coiling mechanism is continuously running in spite of the stopped calender rollers. Thus the sliver is mechanically cut between the calender rollers and the coiler mechanism.

Before the can guide is replaced completely, the calender rollers begin to operate and the delivery of the sliver to the empty can begins immediately after the sliver is cut. The can-replacing mechanism is also operated by pushbutton on the frame when required.

The delivery can is 18x42" but cans from 18 to 27" in diameter can be creelied at the feed side. Electric stop motions are available to stop the unit when the sliver breaks on the extended creel; when the sliver breaks on the calender rollers; when the sliver laps over the top or bottom roller; when the sliver laps over the calender rollers of the ban-tube gear; and when both cans are filled with sliver.

A device to continuously measure and correct sliver weight on drawing or pin drafters was introduced by the Japanese firm of Mitsui & Co. Known as the Ever-Even, the new device uses compressed air, filters, moisture traps, pressure valves, meters and regulators in performing its operations. A continuous record of sliver evenness is automatically plotted for each machine. In addition, the chart shows down-time for the frame. The Ever-Even is said to control sliver within plus or minus 0.5% of the desired count.

By measuring the weight of the delivered sliver on the basis of moving average transformation, the weight of the fed sliver is predicted so that corrections are instantaneously applied to the sliver while still being drafted. Long-term variation is reported to be virtually reduced to zero while short-term variation is substantially improved.

Other features claimed for the Ever-Even are: (1) no over-correction or hunting; (2) since the unit works on air pressure micro-meter systems the effect of humidity and temperature changes is negligible; and (3) simple calibration method.

American Rieter Co. showed its Model DO drawing frame with recommended speeds up to and over 600 feet per minute. The speed is reported not limited by mechanical features of the frame. The drafting arrangement is 3-over-5 with the rolls set in an arc. Maximum fiber control is said to be possible because fibers drag over flutes of the rolls after they have left the nip. Another feature of the roll arrangement is that gears do not go out of mesh when rolls are set. Rolls are adjusted centrally and a scale is provided to show settings.

The Model DO has a new method of continuous cleaning in the drafting zone using axial air circulation. Cleaners are self-cleaning. All moving parts on the frame are mounted on anti-friction bearings and all high speed gears are made of hardened steel with helical teeth running in an oil bath.

The M-6 drawing frame offering practical production speeds of 600 f.p.m. for carded work and 450 f.p.m. for combed work was shown publicly for the first time at the exhibition by Whitin Machine Works. The four-delivery frame is reported by Whitin to be able to run these high speeds because of the heavily constructed frame, liberal use of anti-friction ball bearings, and precision manufacture.

A. T. M. E.

Vacuum cleaning on the M-6 includes not only the rolls but also the trumpet area. Known as PneumaClear, the waste removal system was developed by Whitin in co-operation with Pneumafil Corp.

Equipped with coiler and rotating can table for 18x42-inch cans, the M-6 has a V-belt drive for the coiler tube gear. Anti-friction bearings are used on all rolls. The motor drive is reported to have a soft-start reactor switch to start the frame gradually. An electronic stop motion is provided for the top rolls to stop the frame immediately in the event of a lap-up.

The new Whitin frame has retained the 4-over-5 drafting element used in past years. With large roll diameters used, the frame runs a range of fiber lengths from $\frac{7}{8}$ to 3 inches.

Saco-Lowell Shops' Versa-Matic ADC draw frame was given its first public showing at the exhibition. Reportedly using for the first time electronic controls in yarn preparatory equipment, the new frame is said to compensate for variation in the weight of sliver producing a higher degree of uniformity than previously has been possible. The Versa-Matic ADC (automatic drafting control) is the result of joint research by Saco-Lowell and Zellweger Ltd. of Uster, Switzerland.

The new draw frame is said to require a minimum of maintenance and is as easily operated as the conventional automatic frame. The Versa-Matic ADC, in mill trials, is reported to have improved the breaking strength of yarn, reduced the variation in the breaking strength, and improved elongation and count variation.

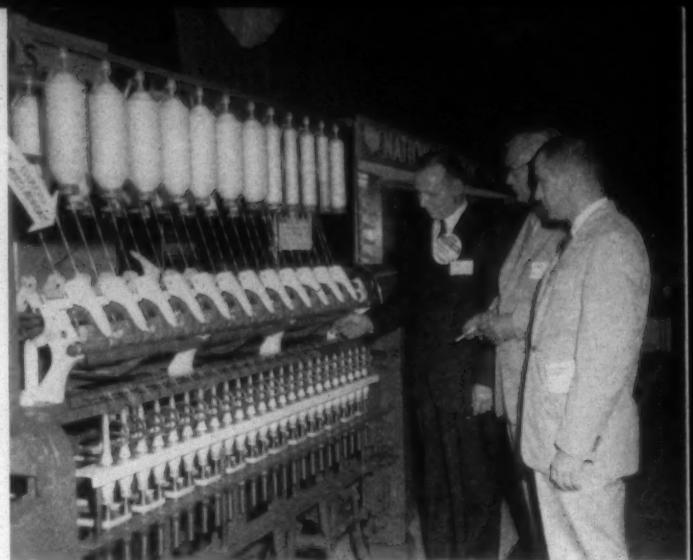
Pneumatic clearers, a new feature for improvement of standard Versa-Matic drawing, was also introduced by Saco-Lowell. Making highest delivery speeds practical, the clearer unit is an integral part of the frame. The same overall height is retained with the clearer. Top rolls are readily accessible for changing roll settings. The clearer unit has special baffles to divert undesirable air blasts from underneath the frame and tests are said to have proved there is no stealing of spinnable fibers due to excess vacuum in the drafting zone.

Combing

Combing equipment displayed publicly for the first time at the exhibition included the Whitin Super J cotton comb. Whitin says the Super J produces up to 63 pounds per hour and has a new half lap with improved needle spacing to handle heavier laps. The Super J can take laps up to 1,200 grains per yard. The new comb has either single or bi-coil delivery with 16x42-inch cans and operates at 150 n.p.m.

Other innovations reported by Whitin include a new over-arm weighting in the draw box which utilizes a 4-over-5 drafting system. The new weighting consists of pre-calibrated springs on the top rolls. Five stop motions are provided to stop the comb in the event of full cans, lap run-outs, lap-ups in the draw box, stoppage at any individual head, or a choke at the coiler head trumpet. A safety switch is also provided to prevent the machine's operation without proper draw box and detaching roll weighting.

Whitin also showed its new Super Lap machine which is

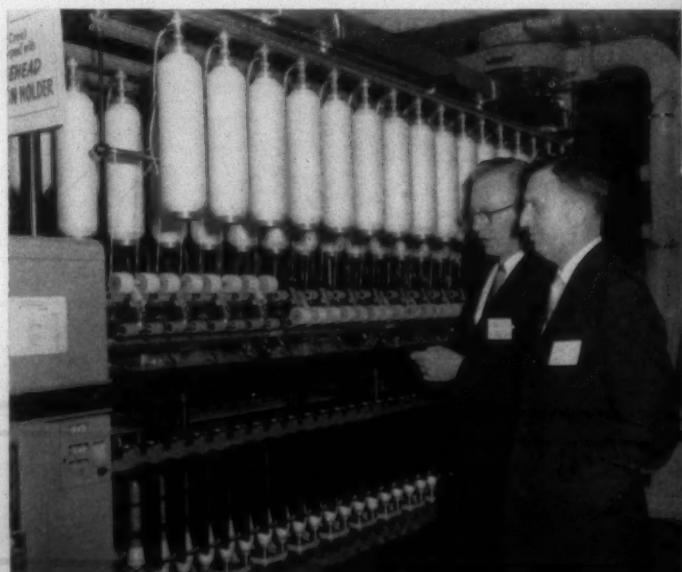


Dixon Corp. displayed three of its spinning changeovers.

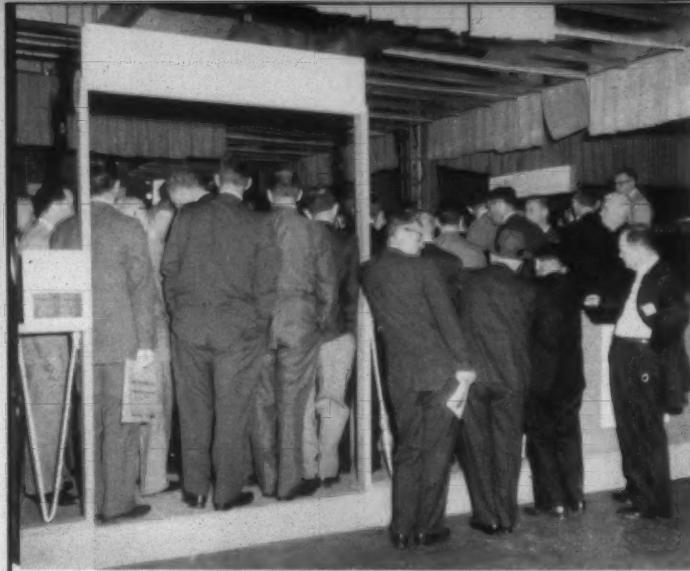
specifically designed to serve as the second unit in its Super Lap Preparation Method (the first unit is the company's Even-Draft drawing). The Super Lap machine has three heads, each fed by 16 to 20 slivers from the drawing frame. The ends pass downward through a vertically arranged special 2-over-3 drafting system and pass along a table where the output product of the heads nearest the delivery end are successively superimposed over the sheet delivered by the adjacent head.

The combined sheets, $11\frac{3}{4}$ inches wide, are drawn through calender rolls and then wound into lap form. The slivers are supported on their passage from the cans to the take-up roll by a creel with individual supports for each sliver and equipped with electric stop motions on the lifting rolls to detect breakbacks in the sliver. Production from the Super Lap machine is reported by Whitin to be about 500 pounds per hour.

American Rieter's new comb, Pattern E-7, is said to run at 180 n.p.m. with a 1,050 grain per yard lap. Production of the Pattern E-7 is in a range from 26 to 60 pounds at 90% efficiency. Other innovations on the new comb include a simplified nipper support and special nipper mo-



Cotton-McCauley displayed its Cleanguide double apron drafting with fabricated roll stand and spring weighting on a Saco-Lowell spinning frame.



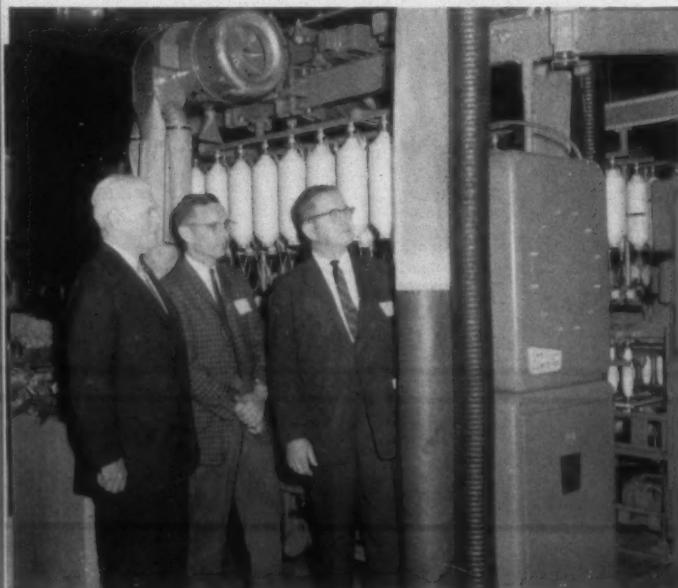
This is about all the view many could get of the Japanese Auto-Doffer unit demonstrated by Edward S. Rudnick. Large crowds gathered at each demonstration of the unit to watch it automatically doff an OM-S sliver-to-yarn spinning frame.

tion, new circular combs, improved detaching and welding mechanisms, and pneumatic weighting of detaching rolls.

Central lubrication is not necessary on the Pattern E-7 because all driving gears run in an oil bath. Noil percentage is adjustable in a central location. Noil adjustment is made with a loosening and tightening of nine screws.

The Pattern E-7 has a slow motion mechanism which reduces the speed of the comber to about 10 n.p.m. for close inspection of the operation. The brush maintains its original high speed in order to clean the half lap while the comber is in slow operation. Needles in the half lap are located in successive rows to split the distance between the needles in the previous rows.

Quality combing at up to 60 pounds per hour is said to be possible on the Hartford 8 comber shown by Platt Bros. Sales Ltd., Oldham, England, (represented by Atkinson, Haserrick & Co.). The unit, which formerly had six combing heads, now has eight, increasing the production potential by one-third. Draw box sliver regularity is said to be slightly better, due to the increased doubling (four instead of three).



On display in the Bahnsen Co. booth was this Cross-Jet spinning frame cleaner and Vacu-Pak.

A. T. M. E.

which more than offsets the greater bulk fed and the higher draft required for a given hank of sliver. Production of sliver at the rate of 7.5 pounds per hour per head is possible at the moderate speed of 120 r.p.m.

The combers are supplied normally to process 9-inch wide laps made on a lap former or 10½-inch wide laps produced on a ribbon lap machine. If required, they can be equipped to process 10½-inch wide laps made on a lap former. Lap width in the combing zone is approximately 11 inches in all cases.

To provide higher can capacities, a twin coiler has been introduced having two cans, each 14 or 16 inches in diameter and 36 or 46 inches high. With this twin coiler, total can capacity may be up to 70 pounds of sliver. These larger size cans are also suitable for creeling behind high speed draw frames.

The standard unit is said to be capable of giving waste extractions down to 6% from most cottons, but special needling is available for both the cylinders and top combs where the comber is required specifically for upgrading. This permits lower percentages to be taken out and gives thorough combing at these low extractions and allows considerable increases in production to be obtained.

Roving

The Rovematic, a new roving frame introduced by Saco-Lowell, is said to provide seven major improvements: (1) the largest package in the industry—14x7—driven at 1,200 r.p.m.; (2) a unique telescoping spindle design which discards the heavy traversing carriage, the long reversing shafts and other carriage lifter mechanisms, the counterbalance weights and the horse-head drive found in conventional machines; (3) the cleanest running and easiest-to-clean roving frame ever produced (all drive components are completely enclosed in the head-end cabinet); (4) a variable speed bobbin drive which eliminates all problems associated with cones and cone belts; (5) a flyer configuration in which deflection is not a concern, even at 1,200 r.p.m.; and with doffing permitted without flyer removal; (6) a time and labor saving design in which all adjustments and change gears are conveniently located in the head-end cabinet; and (7) a completely self-contained oil bath system which abolishes lubrication schedules. All major components are enclosed and run in oil.

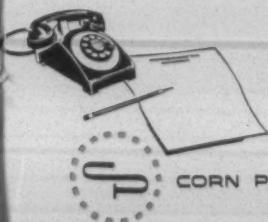
The telescoping spindle arrangement consists of two cylindrical elements—the bolster and the spindle. These elements are rotationally keyed together and always turn in unison. A lead screw, mounted within the hollow spindle, is engaged with a nut which is integral with the spindle.

The lead screw is driven at a variable speed by the bottom longitudinal drive shaft; the spindle and bolster are driven at a variable speed by the middle shaft; and the flyer is driven at a constant speed by the top shaft. When the lead screw and the spindle turn at the same speed, no traverse results. If, however, there is a difference between the two speeds, the spindle will ride either up or down on the lead screw accordingly, carrying the bobbin with it. The precise relationship is established by the main gear box in the head-end cabinet, and transmitted through the longitudinal



*Improve quality—
lower handling costs with...*

EAGLE®
easy flow starch



WRITE OR PHONE Corn Products for expert technical assistance...

helpful data on these fine products for the Textile Industry:

GLOBE® • EAGLE® • FOXHEAD® • TEN-O-FILM® and CLARO® starches • GLOBE® • EXCELLO® dextrines.

CORN PRODUCTS DIVISION CORN PRODUCTS SALES COMPANY • 9 East 55 Street, New York 22, N. Y.

We Represent:

LIMA ELECTRIC MOTORS
FAWICK AIR CLUTCHES & BRAKES
MACHINERY ELECTRIFICATION, INC.
BROWNING MANUFACTURING CO. DRIVES
EATON MANUFACTURING CO. DIVISIONS
THE CLEVELAND WORM AND GEAR COMPANY
THE CLEVELAND SPEED VARIATOR
THE FARVAL CORPORATION
DYNAMATIC—DYNA-TORQ

ELECTRO MOTION CORP.



ELECTRO-MECHANICAL ENGINEERING COMPANY

CHARLOTTE, N. C.
217 W. MOREHEAD
EDison 2-8119

GREENVILLE, S. C.
501 E. NORTH ST.
CEDar 5-1152

Call on us
for fast
service on
Textile Machine
parts
Mill Supplies

Our Specialties

Gears and Chain Drives

Card Flat Stand Driving Brackets

Standard items are shipped
from stock the same day
order is received.

Ask for Catalog—please specify your make machinery.

HARLEY MITCHAM & CO.

(formerly Mitcham & Co.)

N. Marietta St.—P. O. Box 271
Gastonia, N. C.
Phone University 5-8547

A. T. M. E.

drive shafts. Traverse is accomplished with *no lead screw removal* motion, only through slight changes in relative speed.

The new Rovematic flyer is tied-together at both top and bottom and has a lightweight nylon presser. Deflection caused by centrifugal force at high r.p.m. is reduced to a negligible degree. The result of the reduction in deflection is that the point on the presser which contacts the package remains fixed. This point is a critical consideration in building large diameter packages, according to Saco-Lowell.

The winding speed of the roving must vary with the diameter of the bobbin. This is done on the Rovematic through the use of a P.I.V. variable speed unit. The variable output of the P.I.V. is controlled by the builder and is applied to the gear in the differential which is compounded with the bobbin drive sun gear. The speed of the bobbin driving gear, therefore, is the sum of two elements: (1) a fixed component supplied by the bobbin ring gear proportional to flyer speed; and (2) a variable component supplied by the P.I.V. unit through the sun gear, proportional to wind speed.

The drafting element of the Rovematic is a combination of the FS-2 roll and gearing arrangement with the Tru-Set top arm assembly. Close fiber control is provided for running cotton, synthetics and blends with staple lengths ranging from $\frac{1}{8}$ to two inches. The drafting element is completely anti-friction and requires lubrication only at long intervals, according to Saco-Lowell.

Doffing the Rovematic is simplified and is a semi-automatic procedure. All the necessary controls are located in the head-end cabinet. First, to run up loose roving, the clutch is disengaged and the frame is jogged. The P.I.V., operating through the differential, will cause the spindles and flyers to turn at the same speed. Next, the handwheel is turned simultaneously resetting both the builder and the P.I.V. for the new package. Finally, the bobbins are run down to their lowest positions by depressing a pushbutton. The packages can then be lifted from the spindles without the removal of the flyers and the frame readied for a new doff.

The Model P roving frame was introduced at the exhibition by Whitin Machine Works. Whitin reports the frame operates at a spindle speed of 1,200 r.p.m. and winds up to six pounds of roving on the new 14x7 bobbin. A new cone arrangement has been adopted to provide a variable speed drive necessary to accommodate the changing size as the bobbins become filled. A new type precision spindle was also required for the high speed operation, according to Whitin. Available in lengths up to 96 spindles, the Model P is heavily constructed of cast iron, has spring counter-balancing of the bobbin rail, a new system of electrical relays and controls, a modern head-end, and an integral waste collection system.

A new cone outline and drive provides optimum rail motion throughout the building operation on the Model P, according to Whitin. Quick change gearing of the tumbler shaft provides rapid reversal of the bobbin rail at the end of each stroke.

Another new drive system is used on the Model P to drive the bobbins. Two rows of bobbin bears are driven by a common shaft which, in turn, is driven from a vertical

A. T. M. E.

spline shaft beside the head-end. Whitin says helical gears are used to provide efficient, silent, high-speed operation. The new method of bobbin driving eliminates the horse-head unit with its unavoidable creep in the ring rail motion.

Whitin reports greater convenience in making gear changes and setting up the machine as a result of the relocation of most operating parts to the head-end. Twist, lay and tension change gears are all located at the head-end.

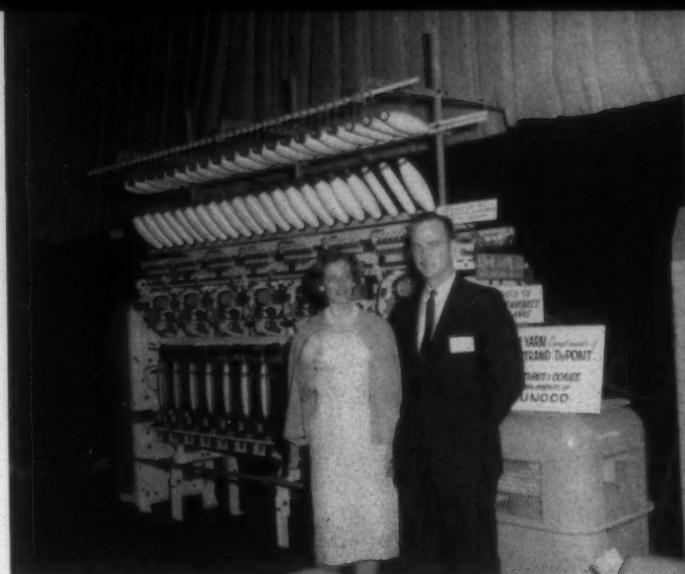
A new automatic wind-back of the cone belt at the end of the doff on the Model P will save the operator time, according to Whitin. When the doff is complete, the bottom cone is raised, slack is run in the roving at the top of the flyer and the cone belt reset to the starting position. These functions are all performed automatically.

Whitin says the doffing cycle can be regulated to start at a selected point along the traverse so the bobbin rail will not be near a reversal point. This important function is performed by a new control located in the head-end which also stops the flyers in the proper position for piecing-up.

The motor and all electrical controls are located at the Model P's foot-end. Power is transmitted through an air-operated disc clutch which provides a soft start. The Model P uses Whitin's Unitrol top arm suspension with pre-calibrated springs and anti-friction top rolls.

The new Platt Bros. & Co. M.S.-3 roving frame was exhibited in the booth of the company's selling agent, Atkinson, Haserick & Co. The M.S.-3 frame features a 14x7 package holding up to 100 ounces of roving and spindle speeds up to 1,200 r.p.m. The frame is equipped with flyers which have a considerably improved finish, particularly on the inside of the hollow leg, obtained by electrolytic polishing, according to the company. Single hole pressers are used for normal winding, while the two-hole presser will permit either normal or high tension winding to be employed.

Latest features claimed for the M.S.-3 include: (1) new gear box for spindle and bobbin drives; (2) front and



Deering Milliken Research Corp. demonstrated its unit for the production of high quality Agilon yarn.

back stop motions; (3) an automatic flyer positioning device; (4) a novel 3-over-3 drafting system; and (5) push-button control of electro-magnetic clutch and motor.

Spinning

Whitin showed its new Standard spinning frame for the first time in public at the exhibition. Available in gauges of 3, 3 1/4, 3 1/2, 4 and 4 1/2 inches and with traverse up to 11 inches, the Standard is 27 inches in width. A new head-end



This model of the Schlafhorst Servoloom Autocopser with a fully automatic loading device to feed bobbins into receptacles for the Draper loom magazine was demonstrated by The Terrell Machine Co.

What
method
saves you
17%
of steel
strapping?

See page 79



This false twist unit for the production of thermoplastic yarns of the stretch, crimp or torque type is produced by Ateliers Roannais de Constructions Textiles. It is being made available in this country by Whitin Machine Works.

assembly contains jack, cylinder, twist, lay and builder gears. All gears are easily accessible.

The Standard's roll stand is inclined at 45° and front-to-middle as well as middle-to-back roll settings are adjustable. The frame has Whitin S.T.A. top arm weighting and ball bearing top rolls. The top arm has pre-calibrated springs providing 30-20-20 pounds pressure on the rolls from front to back respectively. This weighting arrangement leaves the roller beam clear and easy to clean. Bottom rolls are case-hardened and screw-joined.

Spindles on the Standard are Whitin Pioneer with aluminum sleeve, anti-friction center-base. Whitin Kryton rings are supplied although any standard Whitin ring may be substituted. One of the Standard's new features is a balloon control ring and wind down mechanism. Single control rings, one for each spindle, are mounted on a bar running the length of the frame. Normally positioned at approximately one-half the traverse height, the rings on the entire frame are lowered to the bottom of the traverse easily for doffing by turning a crank located at the head-end.

Saco-Lowell displayed its SJ running frame which is



Abbott Machine Co.'s Model II radial quiller is now designed to automatically load the Draper filling magazine.

A. T. M. E.

available in gauges of 3, 3½, 4 and 4½ inches and is adaptable for MagneDraft, Duo-Roth, direct spinning, and worsted drafting elements. Because it is available in various gauges the SJ will accommodate ring sizes from 2 to 3½ inches making it suitable for spinning the complete range of yarn counts.

Lower by 3½ inches than previous models, the SJ is easier to creel and service the drafting element. The spindle rail is still at the same height for convenience of doffing. Traveler changing is facilitated by the inclusion of tilting separators in the SJ's design. The ring rail has been replaced by individual ring holders on the new frame.

An important feature of the SJ frame is newly designed balloon control rings. The bottom control rings are fastened to the same bar holding the individual rings. The upper control rings and pigtails are mounted on a separate traversing mechanism so that at all points in the doff, control rings are placed in their most effective position.

Standard equipment on the SJ is the Saco-Lowell three-way Umbrella creel. The new creel is adjustable in three directions: (1) the whole creel may be adjusted vertically on the creel posts; (2) the creel slats may be adjusted in relation to each other; and (3) the individual bobbin holders may be adjusted longitudinally on the creel slats.

An automatic doffing machine for use on spinning and twisting frames was shown by Kanegafuchi Machine Mfg. Co. of Japan. Known as the Auto-Doffer, the machine consists of a separate unit which attaches to each side of the frame being doffed. Each unit automatically travels from one end of the frame to the other supported by two guide rails fixed to each side of the frame. The doffing units travel from 17 to 25 feet per minute while doffing.

The sequence of operation of the Auto-Doffer is: (1) a guide gently moves the yarn and traveler to the back of the ring; (2) another guide tilts up the lappet and thread guide; (3) a kicker lever forces the bobbin upward, breaking contact with the spindle; (4) a swinging arm with rubber grippers grabs the top surface of the full bobbin; (5) the swinging arm lifts the bobbin vertically from the spindle; (6) excess yarn is cut off by knife; (7) the loose end of yarn at each spindle is held by means of a special type brush until the respective empty bobbin is placed into the spindle; (8) the gripper holding the raised bobbin comes up to the highest position in its raising motion, while a spring on the top of the pushing rod above the full bobbin forces it away from the gripper, down a chute, and into the full-bobbin box; (9) empty bobbins are individually lifted by a continuous bobbin carrier and aligned and stacked into a guide chamber, where each bobbin is held on about a 45° angle by two holders; (10) as the guide chamber moves over an empty spindle, the bobbin being caught on the top of the spindle is released from the lower holder while the upper holder guides the empty bobbin to a vertical position to slide down on the spindle; (11) an auxiliary arm taps the top of the bobbin forcing it down to its running position; and (12) tappets and thread guides are released from the up position to return to normal position.

All 12 of these operations occur in from 0.6 to 0.9 seconds. When the Auto-Doffer unit reaches the other end of the frame, a limit switch on the rail or in the Auto-Doffer

A. T. M. E.

causes it to release its full-bobbin box while the doffing arms are tilted back out of the way. The driving motor is automatically reversed and the units return to their starting position while the power cord winds up onto a special reel. The Auto-Doffer is said to be able to doff a 400-spindle frame in less than two minutes. The rate of yarn breakage in doffing is said to be 30 to 50% less than hand doffing.

The latest model of the MR4 narrow ring spinning frame, demonstrated by Platt Bros., Oldham, England, was described as an all-count, general purpose, high-efficiency machine. One feature cited for the unit is that the total draft can be changed without any alteration to the break draft, or the break draft changed without affecting the draft constant. A simple arrangement, manually applied and automatically released, prevents back-lash in the roller gearing when the draft wheel is removed.

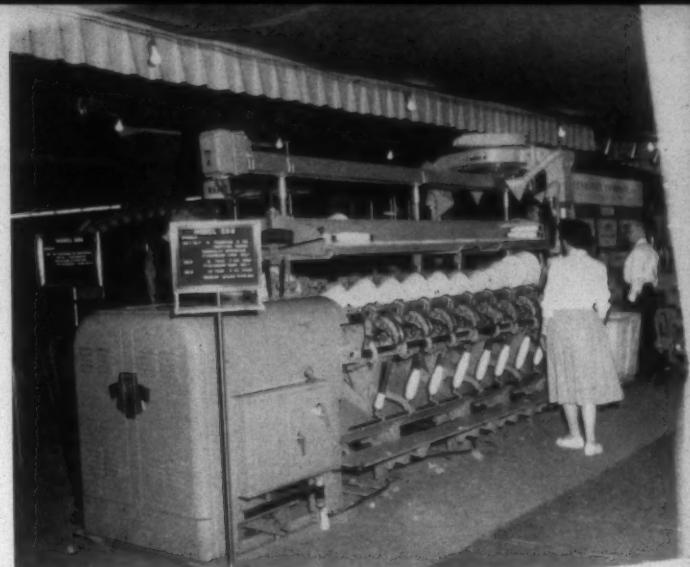
The building motion enables cop, combined or roving build to be obtained readily with the minimum change of components. It is cam actuated, only one cam being required for each type of build. Steel cored rubber tapes give a direct vertical lift to the ring rails and the lappets. The ring rail cross rails are guided from central slides on each spring piece and sealed ball bearings eliminate the necessity for lubrication.

A new method of balancing ring rails has been incorporated in the frame. The new arrangement employs springs and is said to be technically and mechanically an improvement on previous systems. Simple adjustment is said to enable accurate ring rail balance to be achieved readily. This balancing method has no floor fastening and is not dependent on one spring.

Single balloon control rings can be applied to the unit where high speeds and long lifts are involved. Lifts are from 6 to 12 inches; gauges from $2\frac{1}{2}$ to $4\frac{1}{4}$ inches. Platt anti-wedge rings are standard equipment and can be supplied in a range of diameters from $1\frac{1}{2}$ to 3 inches. A wide variety of drafting systems can be applied to the frame to suit individual requirements.



Leesona Corp.'s Uniconer automatic cone winder is said to feature speeds up to 1,200 y.p.m. and a ten-second knotting cycle.



The Model 560 cone winder produced by Foster Machine Co. can handle 6, 7, 8, 10 and 12-inch traverses and has an automatic stop motion to cut the yarn when the cone is full.

Winding & Twisting

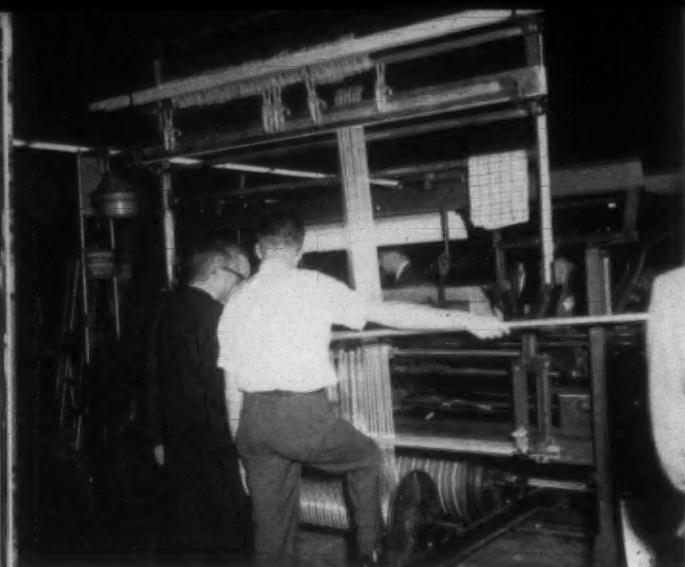
The Terrell Machine Co. demonstrated the Servoloom Autocopser produced by W. Schlafhorst & Co., Gladbach, Germany. The unit is said to feature winding speeds up to 12,000 r.p.m. on cotton, spuns, worsteds and filaments. It has stepless control. Flexibility is provided by independent winding, doffing and pinboarding of each spindle. The unit takes the standard 48-spindle pinboards. Empty boards are inserted at the front of the machine, full boards are re-

What
method
saves you

17%

of steel
strapping?

See page 79



Its Model 66 GSH warp drawing machine was demonstrated by Barber-Colman Co.

moved from the rear. A total of 144 pins can be placed under one winding head. The unit features continuous operation regardless of pinboard feed. Full bobbins are placed on the pinboards in the same sequence in which they are wound from the supply package so they may be placed in the shuttle in the same order. At end breaks or package run-outs, ends can be tied together so that there are only full bobbins on the pinboards. Layer locking and tension control during the stroke prevent sloughing off and allow larger bobbin diameter. A compensating tension device is said to give correct tension from the full to empty package, a necessity for delicate yarns.

Leesona Corp.'s new Uniconer, an automatic cone winding machine boasting speeds up to 1,200 yards per minute and a ten-second knotting cycle, was shown publicly for the first time at the exhibition. The automatic knotting device at each Uniconer spindle greatly reduces down-time caused by the removal of defects such as slubs, gouts and weak spots. The quality of the wound yarn is automatically upgraded. The cone winder operates at efficiencies up to 95% with no need for machine patrolling or the rehandling

A. T. M. E.

of partial supply bobbins. Operator tasks are reduced to creeling bobbins and doffing cones.

The Uniconer's maximum package size is approximately 12 pounds with a base diameter of 14 inches. Package types include knitting, jumbo warping and dye tubes as well as all standard cones. The Uniconer, which ties weaver's knots, can accommodate yarn counts from 8s to 80s and has the driven, disc type waxing arrangement. The standard full-length cone winder is double sided with 96 spindles. Uniconer is built in 12 spindle sections with 12 spindles being the minimum length machine. A pneumatic cleaning system is built into the new machine.

Foster Machine Co. also displayed a new cone winder. Known as the Model 506, the new unit can handle 6, 7, 8, 10 and 12-inch traverses and has an automatic electric stop motion (solenoid actuated) for cutting the yarn when the cone is full. Winding tension adjustment for the entire machine is done from one place, electronically. Other features of the Model 506 are a micronic slab catcher and an indexing device which makes the replacing of bobbins semi-automatic.

The Model II automatic quiller with speeds up to 10,500 r.p.m. was shown by Abbott Machine Co. The company's automatic quillers formerly had a top speed of 5,800 r.p.m. The table speed of the new model is 15 bobbins per minute compared with the earlier model's six. Abbott reports the Model II can be used for winding continuous filament synthetics and various types of spun yarns.

Among the many new designs incorporated in the Model II, according to the company, are a positive oiling system with a dip stick to determine the amount of oil in the oil reservoir, and a tightly sealed housing to prevent any chance of oil coming out onto the copper tracks or bobbins. The bobbin holders have replaceable ball bearings and the bobbin chuck has a renewable rubber lining. The thread traverse guide eye can be quickly and easily replaced in a matter of seconds, Abbott says.

The Model II thread traverse cam is so designed as to permit a seven-wind at 10,000 r.p.m. or over, and has three overlapping traverses to prevent sloughing of bobbins in the shuttle of the loom. Other winds can be supplied if necessary for yarns difficult to handle. Magazine creels can be supplied for cones, cheeses, frame bobbins, etc., and single pin creels for any type supply package desired.

Important savings realized with the Model II are in floor space, cleaning and maintenance, all of which are reduced about 50%. This saving is possible because of the fact only half the number of spindles is required for a given production.

Abbott also showed its Model II-R fully automatic radial quiller. Spindle speeds of the newly designed machine have been increased to 10,000 r.p.m. or more, according to the company. While the operating procedures are the same as with earlier models, the principal difference in design of the winding units is the elimination of the small individual electric motors on the 12-spindle quiller. The rotating table turns continuously through each bobbin cycle and doffing operation instead of stopping each time a full bobbin is doffed and a new bobbin starts to wind as in the case of older models.

Operating speeds of 2,000 to 4,000 r.p.m. are offered



This 44-inch loom with Unifil loom winder was demonstrated by British Northrop Ltd. operating at a speed of 245 p.p.m. The loom offers a number of shedding arrangements.

A. T. M. E.

by the Conorapid cross winder shown by Robert Reiner. Tension tests are said to have indicated a uniform low fluctuation. During the build-up of the complete package, the average tension can be kept a constant low or even slightly decreasing. This results in a firm build-up with a uniform "shore hardness" from inside to outside and also covering the surface of the package, according to Reiner. Stronger bearing and rotating parts permit the build-up of heavier packages. A few adjustments made in a short time allow various package forms to be produced, i.e., pineapple cones, bicones, cones, cylinder cheeses, etc., and the winding field can be adapted to the character of the material being used.

The obtaining of packages of 1 to $1\frac{3}{4}$ pounds with fine deniers in a shorter time automatically produces a better quality cone, Reiner reports, since atmospheric and temperature fluctuations are kept to a minimum. This is also true for packages of heavier denier and higher weight and of textured yarns.

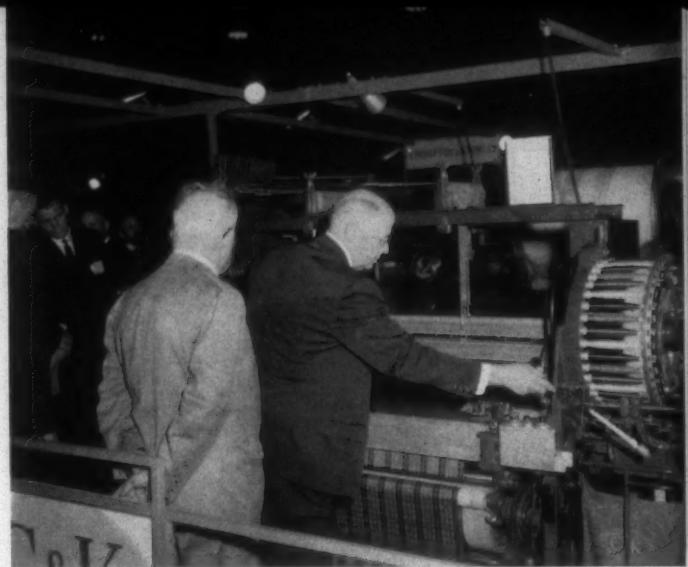
Reiner also demonstrated the SUMA flyerless rubber thread covering machine by Schaffhouse Knitting Machine Works, Switzerland. Available with 40 or more spindles, the unit is designed for the rapid covering of fine and very fine rubber threads for all applications requiring elastic yarns. Each spindle on the unit can be stopped individually by pushing it clear of the driving belt. No parts have to be touched to stop the spindle and no tools are required. The spindles are made from chrome-nickel steel. The shafts rotate on precision ball bearings (inner race rotates against fixed outer race).

Constant spindle speed is provided by endless wear resistant nylon belt. The main motor alters spindle speed steplessly for lower spindles—and a speed variator for upper spindles. Lower spindle range is from 8,000 to 16,000 r.p.m. and upper spindle range is from 4,000 to 16,000. Each spindle bank has a speed indicator.

The flyerless covering process is designed to permit top speed with practically no yarn breakage. Bare rubber thread is fed from king cones to positively driven feed wheels.



Quiet operation and speeds up to 400 p.p.m. are offered by the Maxbo shuttleless loom soon to be produced in this country.



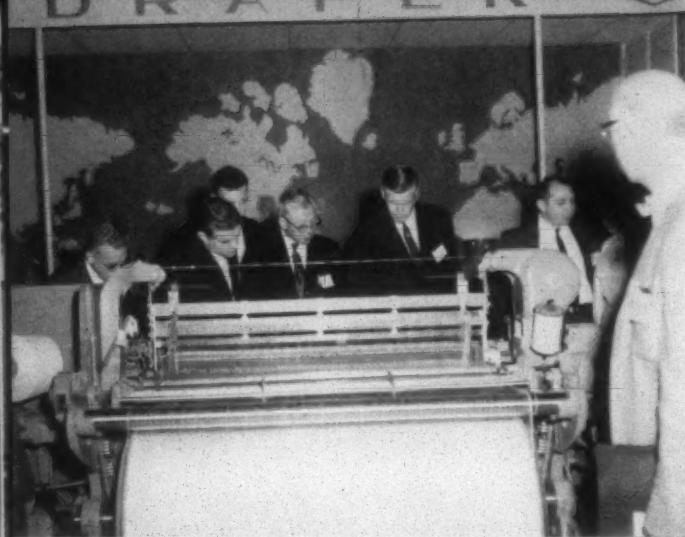
This Crompton & Knowles C-7-S automatic bobbin changing dobby loom with a 4x1 paper indicated box is designed for the production of fine filament fabrics.

The tension of the bare rubber is controlled by changing gear wheels. Elongation is controlled by a speed variator; alterations are made steplessly aided by a speed indicator while the machine is running.

Four fully automatic models of the winders produced by Scharer Textile Machine Works, Switzerland, were displayed by Yeomans Textile Machinery Co. The cotton winder operates at speeds up to 12,000 r.p.m. Filling quills are stacked in the same direction in the filling box after winding. This method ties in with the box loader system now used on some looms. The mechanism to wind the nec-

What
method
saves you
17%
of steel
strapping?

See page 79



Considerable interest was shown in this special slow-speed Draper shuttleless loom which demonstrated the action of the tape filling motion.

essary tip bunch on the quill can be supplied with the winder.

A lifting device takes the empty quills from a bobbin hopper at one end of the winder and brings them to the ready position on top of the unit. A travelling conveyor then receives the empty quills and distributes them to the winding units. The winding speed of the unit is increased or reduced according to the quality of the yarn by simply turning a handwheel attachment to the speed variator. The spindle speed is indicated on a built-in tachometer dial. Dust and fluff are removed by a blower-vacuum system. The travelling system includes a blower arrangement with two nozzles which blow waste toward the vacuum intake ducts.

The pineapple cone winder for filament yarns is built to a standard size of six spindles mounted on a single sided frame. Although the alteration of the stroke of the thread guide is controlled by a single unit common to all spindles, each spindle is absolutely independent of the others. Constant yarn speed during winding is said to be insured by the unit's system of differential friction. The traverse is controlled through a gearbox operating independently to the increasing diameter of the package being wound. The angle or slope of the base can be varied within the limits of 0 to 90 degrees. The full bobbin stop motion is designed to eliminate any additional pressure on the package being wound when the desired diameter is reached.

The automatic bobbin winder for filament yarns was equipped with an automatic pin board stacking device so that the bobbins may be woven off in the loom in the same sequence as they are unwound from the supply package. The winder also features a new thread guide system which works by means of a reciprocating threaded bar. Bobbin build is controlled by a feeler wheel. With a winding ratio of 1:17, the machine runs at a maximum speed of 10,000 r.p.m.

The Rolls 10 winder which is said to produce very large cross-wound packages at the same efficiency as an ordinary crosswinder was shown by Stellamcor Inc. Produced by Ateliers de Construction Gilbos, Belgium, the unit is specially designed for the production of very large cotton, wool, linen, jute, spun rayon and other cross-wound packages. Rolls 10 has a traverse length of ten inches but reduction in traverse is possible. The yarn is guided by means of a grooved drum, which is said to be very resistant to wear. Maximum package diameter is 11 inches. An auto-

A. T. M. E.

matic diameter stop motion acts when the required diameter is reached. The unit is suitable for cylindrical and light conical packages. It features winding speeds of 825 y.p.m.

Stellamcor also had on display the Gilbos cross winder for winding from skeins to cones. It is equipped with a dual speed motor which, in conjunction with a speed regulator, makes winding speeds of 110 to 525 y.p.m. possible. It has an adjustable yarn shift for skeins of 40 to 90 inches. The automatic stop motion stops the machine immediately when ends break or the yarn supply runs out. Each grooved winding drum is fitted with a new clutch arrangement. Any entanglement of the hank or the slightest increase in tension on the yarn allows the drum to slip, bringing the yarn package to an immediate stop, without a broken end.

Franz Muller Maschinenfabrik, M. Gladbach, Germany, represented by Parrott & Ballantine Textile Equipment Co., displayed its Bitroma high speed winding machine. The unit features speeds from 255 to 1,600 y.p.m. It is suitable for the winding of wool, staple fibers, synthetic fibers and blends. It is built in sections and is designed to produce both cheeses and cones of five-inch traverse (Bitroma I) or six-inch traverse (Bitroma II). The BI-drum consists of two separate halves without axial or any other connection. The inner surfaces are smooth and without any tension-equalizing ellipses. The yarn, therefore, cannot wrap around the axle as on conventional drums. The slot width of the drum is adjustable.

The winder has a self-threading device adapted to the course of the yarn, which prevents additional tension by wrapping friction. Coning of tubes and doffing of full packages is effected by pushing one bracket of the package holder sideways. By adjusting the front part of the holder, both cylindrical and conical package can be equally wound on the machine.

The use of balloon breaking devices is said to make possible high winding speeds. Different sizes of supply bobbins and cross wound packages require adjustment of the creel arrangement for the best winding position of these bobbins or cross wound packages in relation to the balloon breakers and tension devices. A centralized adjusting device to change the distance between supply bobbins and balloon breakers in sections of eight spindles is operated by a lever.

The Hacoba winders for parallel or cross winding were demonstrated by Atkinson, Haserick & Co. The units are produced by Plutte, Koecke & Co., West Germany. The basic machines for both parallel and cross winding are four-spindle units. Up to ten units may be coupled together with a drive and motor to form one winding frame. Maximum spindle speed is 6,000 r.p.m. for the parallel winding unit and up to 2,500 r.p.m. for the cross winding unit. Seven cams are available for each unit to vary the traverse from about $\frac{3}{4}$ to $5\frac{1}{2}$ inches. The machines can be set for straight or tapered ends and the diameter of the full package can be set on a layer counter.

The Model 58 elastic covering machine produced by Officine Meccaniche, Mennegatto, Monza, Italy, was exhibited by Atkinson, Haserick & Co. The unit features spindle speeds from 5,500 to 16,000 r.p.m. and independent control of the two spindle board with direct reading on the proper revolution indicator. The rubber thread is unwound from King spools or sprockets. The covered thread is wound in

A. T. M. E.

skeins or crossed bobbins. Endless elastic belts drive the spindles and it is possible to set them up in a close ring. Each spindle may be stopped while the unit is in operation. It is available with either 40, 60 or 80 spindles.

Schweiter Ltd., Switzerland, represented by H. J. Theiler, had several winders for cotton, wool and synthetics on display. Among the units was a supercop winder for the production of supercops on initial cones for wool, cotton and linen. It produces supercops up to $13\frac{3}{4}$ inches long and one to two inches in diameter. Each winding unit operates independently and features individual drive by friction disc. The unit also features automatic changing of the full wound supercop and restarting of the winding. Individual magazines for each winding head hold either 14 or 18 initial cones.

Schweiter's filling winder with automatic feeding device is suitable for the winding of cotton, wool and worsted, linen, etc. The unit eliminates magazines or batteries since the winding units are automatically fed with empty quills. The winder is used for normal quills with or without initial cones up to $10\frac{3}{16}$ inches long and $1\frac{3}{4}$ inches in diameter—with a base of $1\frac{1}{2}$ inches. Various kinds of yarn of different count, quality and color can be wound at the same time on the same unit. The winder was equipped with a special dust removing device which consists of a plastic shield which encloses the supply package. A rotor device provides for tail-less packages by entirely covering the end. An automatic packer box filling device is available to position the wound quills in boxes, eliminating subsequent manual arrangement.

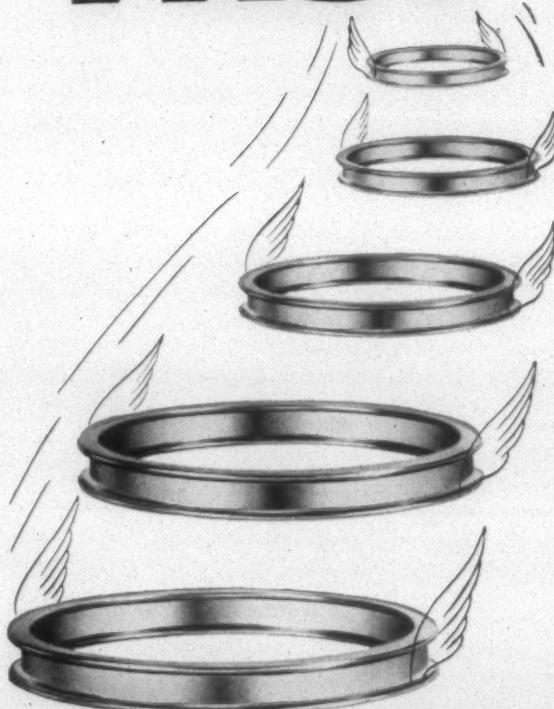
Other Schweiter units are the Vario-Coner and the Monofil Coner. The Vario-Coner is applicable for winding knitting yarns of cotton, wool and worsted, spun rayon mixed yarns, spun silk, etc. The Vario-Coner is a cross wound package which is built up on a paper tube. Winding length is $5\frac{7}{8}$ inches, bobbin diameter is $9\frac{7}{8}$, and bobbin weight is about 4½ pounds. The unit winds from hanks at a yarn speed of about 200 y.p.m. When equipped to wind from cops it achieves a speed of about 440 y.p.m.

The Monofil-Coner is a cross winder for handling nylon, Dacron, Perlon, etc. It produces pineapple cones on paper tubes. Weight of the pineapple cone is 18 ounces. The yarn is wound overend chiefly from drawing cops, twist cylinders with small or large inner diameter, cheeses and from pirns, remnant cones, etc. The winding units operate at either a constant spindle speed (i.e., a rapidly increasing yarn speed) or at a constant yarn speed. Speed ranges from 125 to 680 y.p.m. depending on the type of yarn and the winding arrangement.

Georg Sahm of West Germany (represented by Cosa Corp.) had on display its Makromat high speed scroll-cam semi-automatic precision tuber and coner for giant packages. The Makromat is a multi-purpose machine equipped with an interchangeable traverse mechanism for easy changing from one traverse to another. The conical and cylindrical spindles used on the unit are also interchangeable. The standard Makromat has six heads and is normally delivered with a range adjustment of one to 3 for yarn size. The differential factor for coil spacing in accordance with yarn size is steplessly adjustable within this range by simply turning the belt gainer regulator screw while the machine



FAST



You don't have to wait and worry

As ring specialists, we have no other overriding interests.

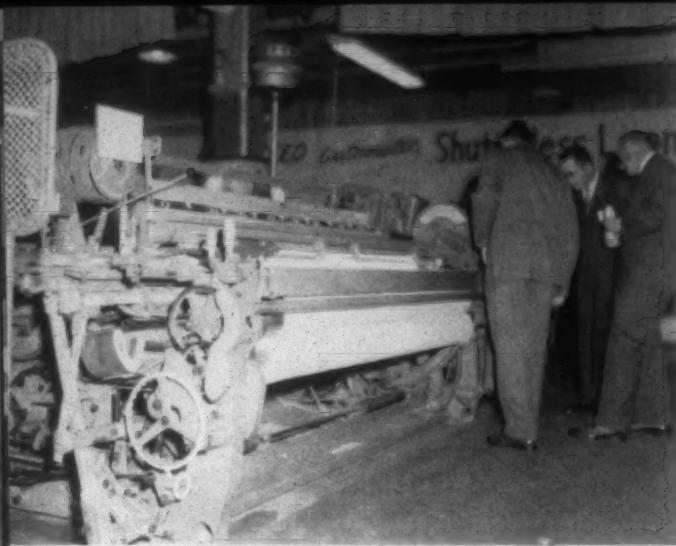
Rings with us are FIRST and FOREMOST
— that's why from Diamond Finish . . .

DELIVERY IS FIRST and FOREMOST

On standard sizes, immediate shipment
is made from stock.

WHITINSVILLE (MASS.)
SPINNING
Makers of Spinning and **DIAMOND** **RING CO.** *Twister Rings since 1873*

Rep. for the Carolinas & Va.: W. K. SHIRLEY, P.O. Box 406, Belmont, N. C.
Rep. for Ala., Ga. & Tenn.: H. L. WILLIAMS, Box 222, West Point, Ga.



Metiers Automatiques Picanol had on display this Model CL-C President loom with 86-inch reed space producing percale sheeting at 170 p.p.m.

is in operation. The maximum package diameter is 380 mm. The unit is arranged so that only one head stops when an end breaks or runs out. Each head operates independently and it is possible to wind a different size of yarn and package on each spindle.

The Wickelmeister, also demonstrated by Georg Sahm, is a semi-automatic precision winder for knitting yarns, making available the advantages of the cheese-wound package to that branch of the industry. The precise lay of the coils of the tubeless cheeses wound on the Wickelmeister is said to give this type of hank packaging ample firmness to hold up perfectly under the roughest handling. The machine can be set for any conventional length of traverse or density of package by changing the interchangeable spindles available in various lengths and diameters. The number of winds is adjustable by changing the gainer pulleys. Coil spacing is adjustable to any yarn size by simply turning a regulator screw. Because of this feature and the individual electric drive of each winding head, different yarns of different sizes can be wound to a package of different weight on each different winding head. Standard delivery of the Wickelmeister is in units of 12 winding heads, but 3, 6 or 9 heads are available on special order. Output is approximately 440 pounds of medium size knitting yarn per eight-hour day, using over-end supply.

The Bikomat-Prakomat winder was also shown by Georg Sahm. The Bikomat is a semi-automatic precision cross winder for pineapple cones and tape-end tubes. It winds monofilament and multifilament man-made yarns up to 100 denier. The Prakomat is the same machine equipped with a traverse form for straight-end cones and tubes. It winds monofilament and multifilament yarns up to 300 denier. The units feature a new type of traverse mechanism devoid of bulky cams or gears. The principal member of this mechanism is a double-grooved scroll running in oil which drives a roller type follower.

Interstate Textile Equipment Co. exhibited the Delerue Rocket Winder produced by D. Delerue & Cie. of Roubaix, France. The six-spindle winder can wind coreless packages of 10 to 30 inches. The unit is said to wind yarns at speeds up to 1,100 y.p.m. at a high crossing ratio. The layers of crossed yarns are positioned on a tapered surface of approximately 18 degrees—this together with the absence of a center spindle or core is said to permit high speed unwinding with virtually no tension. The unit produces pack-

A. T. M. E.

ages up to nine pounds in weight. Cotton yarns from 3s to 50s can be wound, also various counts of woolen and worsted yarns and a variety of boucle and spun synthetics.

Ateliers Roannais de Constructions Textiles had on display its A.R.C.T. false twist machine for the production of stretch yarn. The unit will be made available in the U. S. by Whitin Machine Works. The machine is designed for the processing of thermoplastic yarns of the stretch, crimp or torque type. It is said to provide accuracy and uniformity of heat and temperature control on all machines in any installation, regardless of size. Heater temperatures are constantly monitored and controls stop the machine when there is any deviation in temperature settings.

The machine has double delivery arrangement for positive yarn feed to the heater and take-up. It is said to feature the positive and uniform tension control essential for uniform dye affinity. A maximum range of production possibilities can be achieved with numerous adjustments for control of shrinkage and twist.

Also on exhibit was the company's crimp yarn winder designed to provide even tension throughout the package and to assure correct winding from feeds where the yarns are in more or less tangled condition, as in hank form, or where small diameter tubes, cylindrical tubes or flanged bobbins are involved. The six-spindle unit can use either large or small diameter conical bobbins or cylindrical bobbins for receiving the yarn.

U. S. Textile Machine Co. displayed its new Acme S-Warp Roll doubler-ring twister. The unit is designed for plying fiber glass yarns at speeds up to 9,000 r.p.m.

The Allma high speed ring twisting frame of Allgauer Maschinenbau (West Germany) was exhibited by Saco-Lowell. Allma's Model AZ handles all types of fibers with 12-inch bobbins. Both sides of the frame are driven from a single motor but each delivery is separately controlled so that two different yarns can be produced at the same time. Only 25 inches wide, all models of the AZ can be equipped either as wet or dry doubling frames. Balloon control rings are included as standard equipment.

The Model AZ has ball bearing ring rail traverse which eliminates slipping and requires no greasing, according to the company. The braking of the spindles is effected by moving a brake lever which is either hand or foot operated or by a shin-bone brake. Both brakes are internal acting. All the drive units are totally enclosed and dust-sealed. The head-end is equipped with central lubrication and the ball bearings inside the frame have a grease reserve.

Whitin Machine Works showed two twisters, the Pacemaker Model P-3 and the Commodore. The Pacemaker P-3 is available in gauges from five to seven inches to accommodate rings from 3½ to 5½ inches in diameter. The machine is provided with an 11-inch traverse, or possibly longer depending on ring size, and is reported by Whitin to operate at exceedingly high speeds. Depending on the size package produced, the over-all width of the P-3 is about 39 inches.

The path of the yarn from delivery roll to center line of the spindle on the Pacemaker is almost vertical. Whitin reports this feature contributes to uniform yarn tension and twist uniformity thus improving yarn quality. A new roll design permits operating speeds up to 800 r.p.m. of

A. T. M. E.

the delivery roll where yarn constructions and traveler life permit. The standard feed roll boss diameter is three inches, but the Pacemaker P-3 can be supplied with a four-inch diameter boss for twisting glass yarns.

The latest model Commodore ring twister is designed for twisting tufted rug yarns, tire cord and other heavy cords. The new head-end is equipped with anti-friction bearings and the traverse has been lengthened to 12 inches. Available for either wet or dry twisting, the Commodore is made in gauges from seven to ten inches. Maximum number of spindles varies from 120 on the ten-inch gauge frame to 176 on the seven-inch gauge frame. Bobbins hold up to 11 pounds of yarn and run up to 4,000 r.p.m.

Weaving

Considerable interest was created at the Draper Corp. exhibit by a 46-inch shuttleless loom weaving gauze at a slow speed (30 p.p.m.) to show clearly the action of the tape motion. The tape housing was equipped with a plastic cover so that the full action of the tape could be observed. In addition to the slow-speed unit, Draper had two other shuttleless looms in operation—a 40-inch unit weaving a sports denim fabric at 250 p.p.m.; and a 50-inch loom operating at 238 p.p.m. weaving a spun rayon flannel.

The exhibit also included two conventional type looms. A 50-inch X-3 model was operating at 200 p.p.m. weaving dress goods fabric of acetate yarn. A highly versatile unit, the X-3 is designed to weave all the fabrics normally woven on the X-2 plus many synthetic fabrics normally woven on the XD. It can be furnished with clock spring top, up to six harness, cams on auxiliary shaft, or four harness with cam on cam shaft. Also, it may be furnished with 16-harness, 15/32-gauge dobby or 20-harness, 3/8-gauge dobby. The display model was equipped with 16-harness, 15/32-gauge dobby.

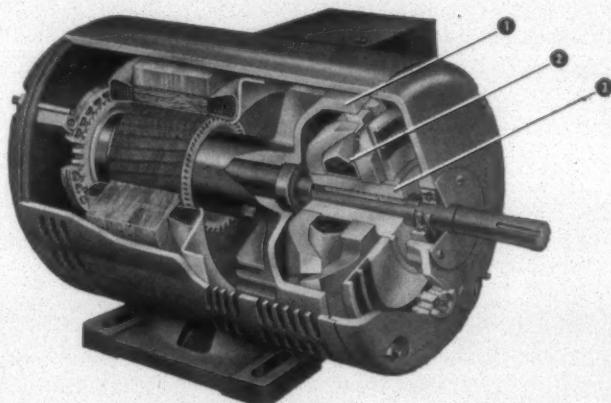
The second conventional model, the XB, was shown weaving a suiting fabric, a blend of nylon acetate and viscose at 175 p.p.m. The XB is designed primarily to weave heavy suitings. It is equipped with a center fork filling motion, Tru-Tension let-off and the Draper automatic filling magazines. The XB can be built with a dobby and with or without 2x1 box motion.

A new development for weaving the new lightweight and midweight suiting materials was introduced by Crompton & Knowles Corp. with its C-7A loom. The new model is 81 inches between swords for 25 harness, 3/8-inch gauge, for 20 harness, 15/32-gauge dobbies and 4x1 box. The C-7A has all the features of the standard C-7, including pushbutton operation, plus a number of added developments.

The loom is three inches lower at the arch and top of the dobby than its predecessors. "A" type cross girts and box steel lengthwise girts are said to contribute to the greater frame stability essential to higher speeds.

The dobby head, of the paper indicating type, is mounted on a lower but strengthened and improved support to reduce vibration and permit higher loom speeds. The harness jacks are substantially reinforced to handle the required loads. A cam dobby drive from the crank shaft

**Get Stepless
Adjustable Speed
from AC Power with
EATON
DYNAMATIC®
FRACTIONAL HP
AJUSTO-SPEDE® DRIVES**



- 1 INPUT DRUM ASSEMBLY
- 2 FIELD COIL
- 3 OUTPUT FIELD ASSEMBLY

Wherever infinite adjustment and accurate control of speeds are required, Eaton-Dynamatic Ajusto-Spede Drives offer a simple, low-cost solution to the problem—stepless adjustment from zero to full output speed, and accurate control of any speed within the speed range.

The Dynamatic Ajusto-Spede Drive is an integral combination of AC constant speed induction motor, eddy-current coupling, and plug-in type single-tube electronic control. Torque developed in the motor is transmitted to the driven member by electro-magnetic attraction; there is no mechanical contact between the driving and driven members.

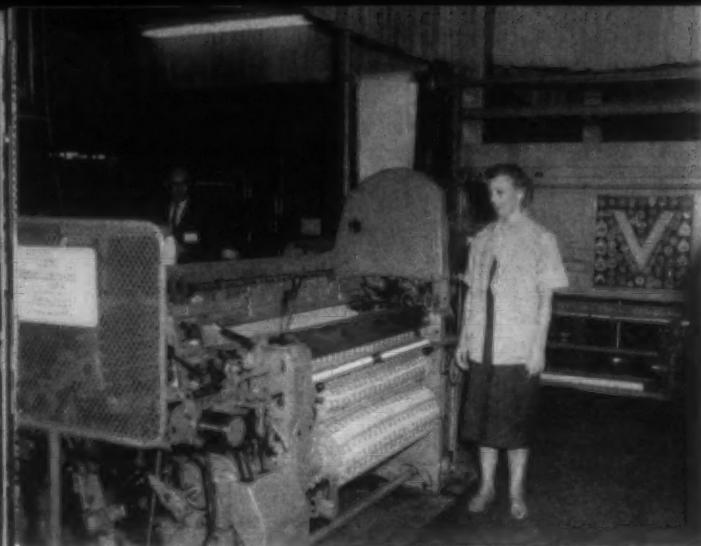
Dynamatic Ajusto-Spede Drives operate on standard 115/230 volt, single phase, 60 cycle or 220/440 volt, 3 phase, 60 cycle alternating current—no special power source is required. Sizes are $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ horsepower at 1600 RPM; $\frac{1}{2}$, $\frac{3}{4}$, and 1 horsepower at 3200 RPM.

With standard, special, or remotely mounted transistorized control, Dynamatic Ajusto-Spede Drives offer many worthwhile advantages not found in other methods of speed control. Send for illustrated descriptive literature.

ORIGINATORS OF
EDDY-CURRENT SPEED CONTROL EQUIPMENT

EATON DYNAMATIC DIVISION
KENOSHA, WISCONSIN





Adolph Saurer Ltd. displayed this Type 100 automatic 6x1 drop box loom for the production of multi-color fabrics.

permits dwell and crossing control to suit the yarns employed and match the speed of the loom.

Crompton & Knowles reports that the most outstanding innovation on the C-7A is its cam lay (not crankshaft) drive. Accurately hardened and ground conjugate cams mounted on the cam shaft are designed to control the lay so that it moves very slowly from approximately 30 degrees back center, making up this time by more rapid acceleration as it approaches front center. This action provides a number of advantages: (1) Allows more shuttle travel time—slower shuttles reduce wear on picking and checking parts; prolongs shuttle life and reduces filling breakage or—(2) permits increasing loom speed in picks per minute without exceeding normal loading on picking and checking parts. (3) Permits reduced lay travel which in turn—(4) increases harness capacity without increasing loom depth or decreasing shuttle clearance in the shed. (5) Allows easier brake action for a filling stop by combined action of cam lay drive and electrically indicated center stop. (6) Reduces protection shock and consequential damage since the lay is nearly devoid of inertia when the brake is applied—

A. T. M. E.

more than adequate clearance for the shuttle exists between the reed and the fell when the lay comes to its gentle stop.

In addition to these factors which permit higher operating speeds and higher across-the-board work assignments, the standard C-7 feature of electric protection permits less shuttle travel than other looms to further reduce normal wear and tear—or to permit increased loom speed.

In an effort to insure higher quality cloth using today's finer counts of yarn, the C-7A has an improved all-purpose worm driven take-up featuring take-up roll 8 1/8-inch outside diameter as compared with five inches on some looms and two preset, self-aligning, self-equalizing pressure rolls. This gives a 63% increase in roll surface.

By a unique device called "pick selector unit" proper combinations of four of the eight change gears provided with each loom will allow a fine increment pick range from approximately 8 to 193 p.p.i. The demonstration loom was equipped with a Hunt let-off arranged to handle up to a 32-inch diameter beam—although a variety of let-offs are available.

A lightweight lay beam, strengthened box motion, and new timing contribute to better loom performance at high speeds. Other features designed to help provide better loom performance are: cam-operated transfer mechanism; a new revoker that works at high speeds; cone picking; the scissors thread cutter; and vacuum filling control.

Also on exhibit was the C-7S loom with four-color rotary magazine, which has 36-bobbin capacity, for the production of fine filament fabrics. New features are said to make the rotational action required in the selection of the proper replacement bobbin a simple and gentle procedure. After each transfer, the magazine advances one position so the maximum motion required for the next transfer cannot exceed three positions.

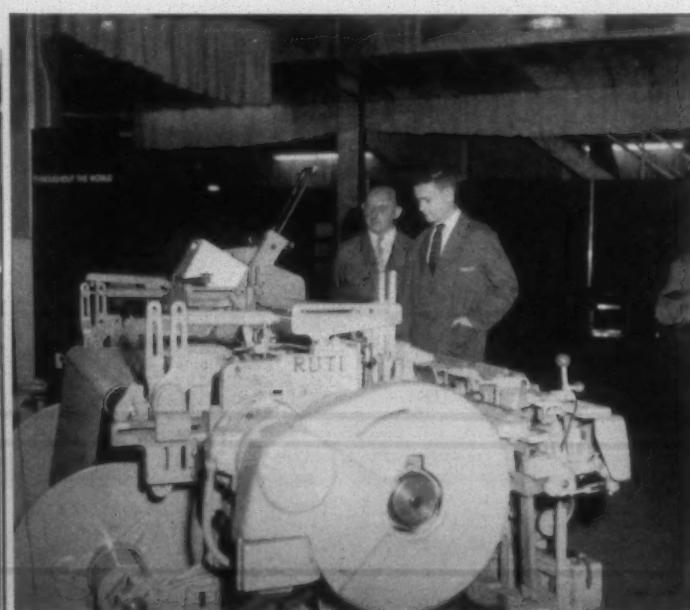
A foot-operated switch causes the magazine to rotate and frees both the operator's hands for replenishing the bobbins in the magazine, improving his efficiency in this duty.

A flight type of optical electronic feeler takes its indication for transfer from the bobbin while the shuttle is in flight. Consequently, variations in boxing of shuttles through "rebound" or failure to "get home" will not cause run-outs or affect the filling waste adversely.

Since there is no physical contact with the yarn on the bobbin, no damage can occur even on the finest counts and since light reflected from a band of Scotchlight tape on the bobbin causes the indication, metallic yarns create no problem. Both take-up and let-off on the loom follow the silk loom tradition.

Other Crompton & Knowles models on display included a C-7 terry loom with a roll reversing, punched pattern indicated dobby; a C & K needle loom; the PAPA loom; and the 1,304-hook, double lift, double cylinder, high-speed jacquard.

The quiet, relatively vibrationless operation of the Maxbo shuttleless loom attracted the attention of numerous visitors to the Edda International Corp. booth. The Maxbo loom uses a jet of air to insert the filling into the shed. Picking speeds of from 320 to 400 are claimed for the unit. Thinner reeds can be used on the loom because of the



Among the looms displayed by Ruti Machinery Works was this automatic box container loom, Model BANLXK-M, for a wide range of fine and coarse filling.

A. T. M. E.

elimination of the wearing action of the shuttle. This enables knots to pass more freely. The warp beam regulator operates entirely automatically and does not require setting. It is actuated by the tension beam and retains a constant warp tension from the loaded to empty beam. The warp tension is set by means of tension springs. Either electrical or mechanical warp detection can be supplied. The working width of the loom is adjustable down to 37 inches.

Edda also had on display the Titan warp tying machine which immediately stops in the case of a fault in the lease. Another accessory unit exhibited was the Excelsior reed grinding and polishing machine which is able to grind without brushing or to brush without grinding.

Wilson & Longbottom Ltd., Yorks, England, represented by International Sales Management Co., Charlotte, N. C., displayed its latest type of double shuttle face-to-face Wilton and velvet carpet loom. New features included in the loom are comprehensive stop motions; large diameter beams with side loading arrangement for the inside bottom beam to facilitate quick beam changing; new type positive heddle connections to the underside of the heald frames only with single point adjustment for fixing the shed angles; and positive pile feed delivery motion.

The loom was operating at 100 double p.p.m. giving an effective speed of 200 p.p.m. It was producing a standard two-shot Wilton with 18 p.p.i. The pile yarn was 2/50s

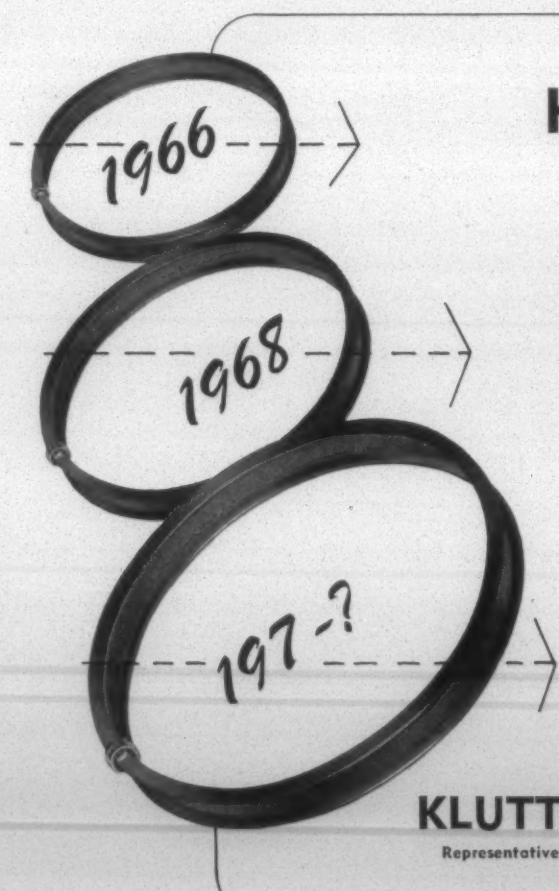
hard twist woolen, stuffer was 2/8s jute, chain was 3/9s cotton and filling was 2/8s jute.

The looms are available up to 12 feet wide. Also on display were jacquard devices for broad and narrow face-to-face double shuttle Wilton looms and for broad and narrow wire Wilton looms. Models and installations are available using any size or pitch of jacquard card and for carpets from 3/4 to 24/4.

Adolph Saurer, Arbon, Switzerland, represented by Saentis Inc., displayed four of its looms of the 100W Type. The looms are constructed on a "box-of-bricks" principal—that is, each loom consists of the basic machine which is extended to the desired type of application by additional devices. Saurer says this has been necessitated by the fact that many mills are weaving rayon, cotton, synthetics and other fabrics in the same plant with single and multi-shuttle automatic looms.

A new Saurer 6x1 drop box loom is said to make possible the weaving of five or six colors without the high labor cost formerly associated with such weaving. The unit is composed of the basic loom, the six-color drop box and the six-color vertical magazine. To satisfy demands for security of operation of the six-color drop box change, a special security device for the gears and drop box has been developed, combined with an instantaneous stop motion. The vertical magazine can hold up to 92 quills of filling.

A single-shuttle automatic loom has been equipped with a self-acting reloading device that is designed to reduce labor costs. The magazine reloading system is fed from an attached box containing 120 bobbins. To reload the latter, the bobbin transport box, which is provided with a slid-



How Long Will a Lubri-Cased Ring* Last?

Klutzz Lubri-Cased Rings have been in service over three years and none has yet been turned. Few show signs of serious wear. And . . . because Lubri-Casing protects the exposed lower portion of the ring against rust and corrosion . . . you are assured at least double that service from every Klutzz Lubri-Cased Ring and probably many years more.

Long ring life is only one of this ring's many advantages. Higher spindle speeds, full speed break-ins and longer traveler life give higher production and make the Klutzz Lubri-Cased Ring supreme in the field.

And they cost no more than ordinary rings.

Will be exhibited in Booth 110A, Southern Textile Exposition, Greenville, S. C., Oct. 3-7.

*Trade Name—Patented

KLUTZZ RINGS, INC. *Gastonia, N. C.*

Representatives: Thomas H. Watson, Maiden, N. C. • Hugh K. Smith, West Point, Ga.



Parks-Cramer Co. had on display the TravelVac unit in tandem with the Oscillaire loom cleaner with fixed and oscillating air outlets.

ing cover, is placed on the supply box. The slider will then be pulled away, opening the way for the bobbins to slip down into the attached bobbin container. Normal bobbins are used with the system, so that it is not dependent on any particular make or model of winder. No special bunch on bobbin tips is required. The purely mechanical operation of the reloader eliminates the necessity for any pressure or suction of air. The bobbins can be stocked in the conventional transport boxes instead of special loading cases.

Saurer also had on display a Type 100W loom equipped with Unifil loom winder. Unifil permits the possibility of manufacturing thick and fine weft material, Saurer said. The box loader loom cannot be considered for the production of fabrics made with rayon or chemical yarns.

One of the most attention-getting features at the Saurer exhibit was a single-shuttle automatic terry towel loom combined with the Huttwil electro-magnetic name weaving apparatus. The name weaving apparatus eliminates the necessity of punching cards for each name change. The control mechanism contains a series of 44 contact rollers, each

A. T. M. E.

having its own function (letter, punctuation, fancy border weave effects). The combination of the functions necessary to weave a given name is carried out by the weaver, who combines the desired effects of the contact rollers by establishing contact with the use of plugs pushed into the holes of the control box cover, which constitutes a distribution panel. While this name weaving is done, the second half of the distribution panel is available for preparing the name combination for the next order. To go over from the second order, it is only necessary for the weaver to reset the loom unit counter to zero and to switch one-half of the distribution panel over to the other half.

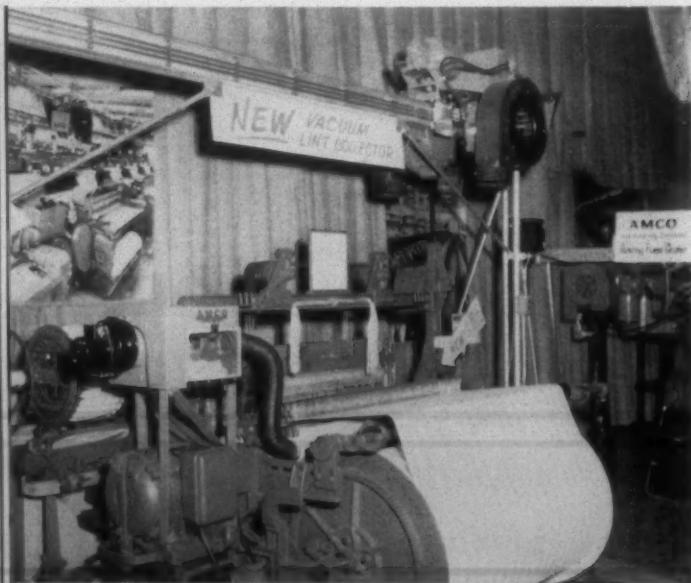
The terry cloth loom itself features: (1) The centralized control mechanism is actuated by a roller chain from the tappet or dobby driving shaft. By this means, changes in the type of cloth can be easily achieved. Since several other functions are controlled from a camshaft, operational difficulties have been eliminated to a considerable extent. (2) Positively working ratchet letoff is provided for the pile warp, driven by the control mechanism and equipped with a compensating brake. The required alteration of the warp tension for weaving terry towel and plain weave is thus granted, which is essential to insure the manufacturing of good borders. (3) The combined warp stop motion for ground and pile warp is equipped with a movable rail for the lifting of the pile end droppers. By this means, an all-round application of the automatic stop motion for all terry fabrics with single pile ends is possible. (4) Centralized terry-motion parts are easily accessible.

Ruti Machinery Works Ltd., Switzerland, represented in the U. S. by H. J. Theiler Corp., showed four loom models: (1) Model BANLXK-M 1x1 box container loom for a wide range of fine and coarse filling; (2) Model BANGTW/4 4x1 box loom for fancy and check fabrics; (3) Model BANLX-U high speed loom with Unifil loom winder; and (4) Model SINZAW/4 4x1 automatic bobbin changer loom for silk and rayon fabrics.

Model BANLXK-M was operating at 240 p.p.m. on 100% cotton broadcloth, plain weave. It was equipped with a box container filling replacement device. The device provides for the placing of a box of bobbins next to a slide chute type of filling magazine. When a pirn is replaced in the shuttle a simple gripper moves a new bobbin from the container box and releases it into the slide chute. Immediately preceding the change, a sleeve-adapter glides over the bobbin tip and withdraws the yarn end.

Check dress material was being woven at 184 p.p.m. from yarn-dyed cotton on the Model BANGTW/4-MM. The 4x1 unit is said to produce fabrics with an excellent hand and appearance as well as face evenness. The use of an automatic container attachment accommodating up to 76 filling bobbins is said to provide greater weaver productivity.

Model BANLX-U high speed loom with Unifil loom winder was weaving plain cotton pajama material at 232 p.p.m. Ruti high speed looms have a double traverse and low center of gravity enabling loom vibrations to be reduced to a minimum, and making possible an increase in speeds. The crank shaft is mounted on both sides of the cranks, insuring smooth operation of the loom even at peak performances. The shuttle box binders on the units have



A prototype unit of a new cleaning arrangement was demonstrated by American Moistening Co. The new unit uses suction cleaning on one side of the loom, and a gentle flow of air blowing toward the suction outlet from the other side.

A. T. M. E.

no fulcrum, which insures a long braking distance and thus a parallel and gentle stopping of the shuttle. Since there are no protectors to be lifted and more time for the shuttle flight, it is possible to achieve: higher loom speed at the same shuttle speed; gentler picking; less wear and tear; and no sloughing off of the filling material. An additional spring pressure in the open shed position guarantees a safe shuttle flight and the effective locking at beat-up facilitates the manufacture of heavier fabrics.

There is no bobbin change if the shuttle is in the wrong position and the loom is stopped if the shuttle does not enter the box correctly.

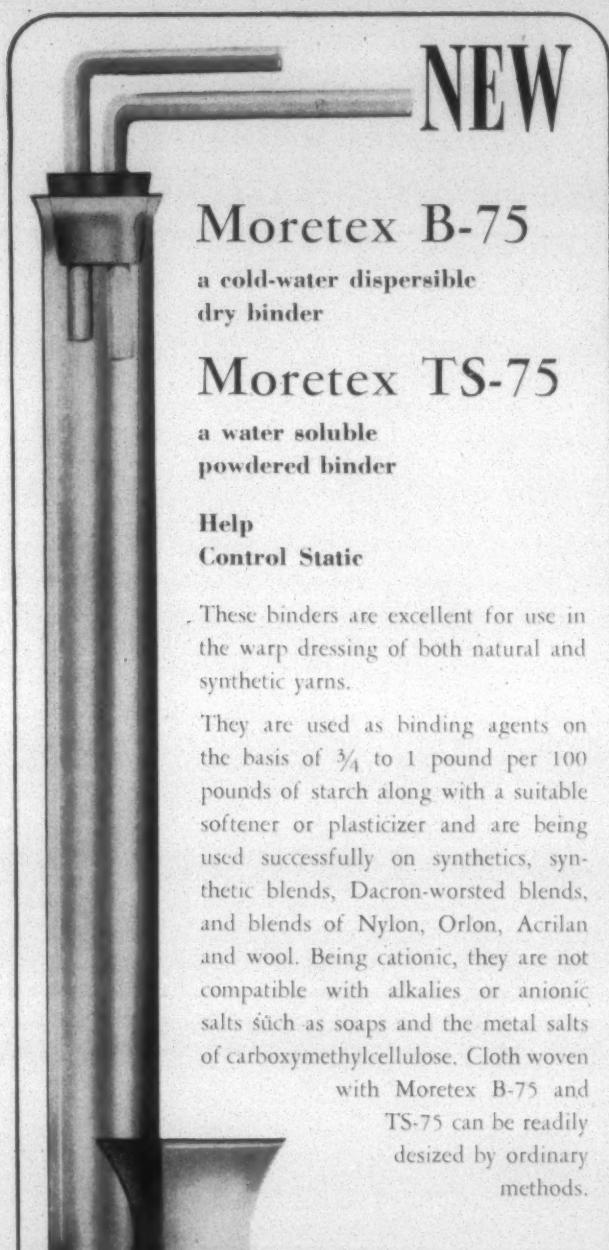
The four-shuttle automatic silk loom, Model SINZAW/4 with automatic bobbin changer was demonstrated operating at 178 p.p.m. using rayon filling and nylon warp. The new "drop-shaped" battery for four colors holds 76 bobbins and guarantees a quick, gentle, and safe bobbin change. The back rest roller on the loom can be easily adjusted to the desired height. The automatic warp let-off motion is controlled by what is described as an accurately working automatic let-off with lever weight, which compensates for the smallest variations in tension. The unit may be equipped with a taffeta cam motion, with dobby or with a jacquard machine.

The Sample Weaving Machine Co. of Liestal, Switzerland, demonstrated its sample weaving loom with electro-magnetically operated shafts which is designed to simplify the achieving of a particular pattern of material. The electro-magnetic control of the different harnesses make it possible to operate any of the harness for any particular change-over line on the design card. This does away with the dependence on elaborate designing and cutting of new cards or changing of drawing-in drafts. The loom is provided with an electrically operated selecting board. By simply changing different contact plugs on the board one radically alters the standard weave.

Texnovo, Milan, Italy, represented by Snedeker & Co., Ansonia, Conn., exhibited three of its narrow fabric looms. Two 16-space Ultratex needle looms were on display, one producing zipper tapes and the other producing elastic underwear webs. A Texnovo bobbin weaving unit was producing elastic corset fabrics six inches wide. Operating at 800 p.p.m., the needle looms produce rigid tapes and ribbons up to one inch and elastic webbings up to 1 1/2-inch at up to 3,500 yards in eight hours.

With the Texnovo tape loom, the shuttle gear is replaced by a bobbin weaving unit whereby the web results from a continuous filling thread supplied by cheeses carrying two pounds of yarn or more. The unit is said to offer a saving of 80% on labor over shuttle looms weaving narrow fabrics.

Bonas Bros. Weavematic Looms Ltd., England, demonstrated two models of its Weavematic looms. The looms can be loaded with extra-large warps of 10,000 yards. Because filling yarns are fed from large cones, magazine fashion, a great length can be woven and accommodated easily in bins. Width of the fabric is accurately controlled by preset measuring of the filling yarn. The Mark V loom is especially suitable for zipper-tapes and similar fabrics, and for a whole range of narrow elastic fabrics. Two fabrics are woven, one above the other, using a common reed.



NEW

Moretex B-75
a cold-water dispersible
dry binder

Moretex TS-75
a water soluble
powdered binder

Help
Control Static

These binders are excellent for use in the warp dressing of both natural and synthetic yarns.

They are used as binding agents on the basis of $\frac{3}{4}$ to 1 pound per 100 pounds of starch along with a suitable softener or plasticizer and are being used successfully on synthetics, synthetic blends, Dacron-worsted blends, and blends of Nylon, Orlon, Acrlan and wool. Being cationic, they are not compatible with alkalies or anionic salts such as soaps and the metal salts of carboxymethylcellulose. Cloth woven with Moretex B-75 and TS-75 can be readily desized by ordinary methods.

FOR

lubrication, additional binding, abrasion resistance, and smoothness, we recommend

MOROTEX PE Special (non-ionic) for worsted and wools
MOROTEX A-164 (cationic) for synthetics and blends

Write today for full information and samples.



MORETEX *Chemical Products, INC.*

314 W. Henry St., Spartanburg, S.C.
Established 1908

Manufacturing Chemists



The Standfast patent continuous molten metal vat dyeing machine provides for the automatic control of metal temperature, and the dye liquor temperature and level.

Reed width limit is $1\frac{5}{16}$ -inch. The Mark VII loom is for wider fabrics and those of the more intricate patterns. Two fabrics are woven simultaneously on this unit also. Output is about 100 yards per hour on a fabric with 33 p.p.i. Maximum reed width is two inches.

Metiers Automatiques Picanol, Belgium, had on display four models of its President series of looms. The looms have frames and cross rails of pearlite structure cast iron. All contact and bearing surfaces are machined.

Each shuttle box has two swells. One smaller swivelling swell at the box entrance lifts the daggers of the protector rod. On back dead center, this swell comes in line with the box back giving this guide an exceptional length of 14 inches, the second swell braking the shuttle. On the pick, both shuttle box swells are released. This method is said to insure a perfect shuttle flight without overheating the shuttle. A new parallel picking motion, replacing the conventional shoe type, is said to give the shuttle a straight and uniform impulse.

The box-back is fastened at a fixed position, but the reed is adjustable, either at its base or top, thus avoiding a new setting of the shuttle box when putting a new reed in the loom.

The harness-frame on the looms has a top suspension without top-rail. All spring plates and reversing discs run on ball-bearings. By means of a special device the shed opening can be adjusted while the loom is running.

A special device for weaving poplins, besides the setting of the shed opening, provides an additional setting, dividing the two sheds in groups, having a staggered crossing of shed. The distance between the two crossings is adjustable from $\frac{1}{4}$ -inch to $1\frac{1}{4}$ inches. This arrangement is said to allow weaving with a low tension and increases the efficiency of weaving.

In operation at the exhibit were the following models: (1) Model CM-R with Staubli dobby for 20 harness was producing 100% rayon upholstery fabric on 12 harness at 180 p.p.m. Warp was 30/2 spun rayon and filling was 6/1 spun rayon. Reed space was 69 inches. (2) Model CL-C for four harness had a reed space of 86 inches and was producing percale sheeting on two harness at 170 p.p.m. Warp was combed cotton 32.5 and filling was combed cotton 37.5. (3) Model CC-C for six harness was operating at 245 p.p.m. producing broadcloth on four harness. Warp was combed cotton 46/1, filling was combed cotton 32/1. The

A. T. M. E.

loom had a reed space of 48 inches. (4) The final loom, Model CM-C for eight harness with Unifil, was producing a Bedford cord on six harness at 240 p.p.m. Reed space was 46 inches. Warp and filling were of cotton.

The entire series of looms can be equipped with one of the three methods of filling replacement: standard circular magazine, box loader or Unifil.

Two models of its MRT series of looms were displayed by British Northrup Ltd., Lancashire, England. Model MRT/44, a 44-inch loom equipped with Unifil loom winder, was operating at 245 p.p.m. producing a fabric of plain spun rayon, 18s warp, 18s filling. The loom can also be equipped with the automatic box loading system of filling replacement.

The loom offers a number of shedding arrangements including: (1) Outside cam shedding up to 12 cams. (2) Positive low slung reversible dobby up to 16 harness $\frac{9}{16}$ -inch pitch or up to 20 harness $15/32$ -inch pitch. This positive dobby is geared to the worm take-up motion. (3) Negative cam operated dobby up to 16 harness $\frac{9}{16}$ -inch pitch or up to 20 harness $15/32$ -inch pitch. A lateral spring-easing under motion is supplied with the 16 or 20 harness as required. (4) A jacquard machine.

Single shuttle, high speed, narrow looms are equipped with a side filling fork, which automatically stops the loom when a filling breaks. On filling stops the shuttle is in the right-hand box and a foot operated pedal enables the weaver to eject the shuttle in order to re-thread the broken filling.

A separate selvage motion for 1x1 or 2x2 selvages can be fitted and also a selvage bobbin holder, which controls the tension and rate of let-off. The Bartlett automatic worm let-off motion is fitted and is driven by means of an adjustable cam mounted on the bottom shaft of the loom.

Model MRT/70-4, a 70-inch, four-color loom, was operating at 154 p.p.m. producing a honeycomb furnishing fabric. The sliding gear box motion runs in a sealed oil bath. An escape motion is incorporated to protect the gears. The box motion is controlled by a separate pattern barrel synchronized with the dobby cylinder. The same pattern barrel can be controlled by dobby, jacquard or cam shedding. There is also a safety escape on the box pedestal and a mechanism for stopping the loom if the boxes should lock. A picker clearer is fitted to remove the picker out of contact with the shuttle tip before the boxes change. The loom was also equipped with center filling fork and stop-on-pick motion.

A. E. Staley Mfg. Co. had on display a diagrammatic exhibit of its high-temperature converter for the preparation of warp sizes from unmodified corn starch. In a continuous operation, the converter is said to modify the starch paste to a unique, non-congealing product of reduced viscosity. The system is said to present a relatively simple and economical means for mill conversion to obtain a starch of the desired fluidity and with excellent film-forming properties. The converter is controlled from a central control panel which includes two strip recorders to give a complete record of the unit's performance.

Except for adjustments to obtain desired variations in properties of the warp size, the converter is simply controlled by a master start-stop switch. When it is started,

A. T. M. E.

it goes into the filling phase—admitting slurry to the jet. The discharge valve remains closed and the holding tank fills with normal input flow.

When the starch in the holding tank has risen to the preset level, the discharge valve opens and converted starch starts to flow into the storage tank. Input and output flow remain balanced and a uniform level is maintained in the holding tank as long as the storage tank demands more starch.

When the starch in the storage tank reaches the probe of the high level control, the slurry valve closes and slurry flow to the jet stops. Converted starch continues to flow from the holding tank at the normal, uniform rate.

After all the starch has been discharged and the pipe lines have been cleared, the empty tank remains at operating pressure and temperature. The converter is now ready to return automatically to the filling phase upon demand by the low-level control in the storage tank.

Parks-Cramer Co. featured its complete line of traveling cleaner equipment, including its TravelVac unit in tandem with the Oscillaire loom cleaner. The Oscillaire, with fixed and oscillating air outlets, co-operates with the TravelVac by moving lint to the warp alley. TravelVac has twin flexible long sleeve nozzles for high capacity pick-up. Advantages of the system include greatly reduced compressed air loom cleaning and manual floor sweeping; elimination of frequent causes of lint boil-ups and contamination; re-

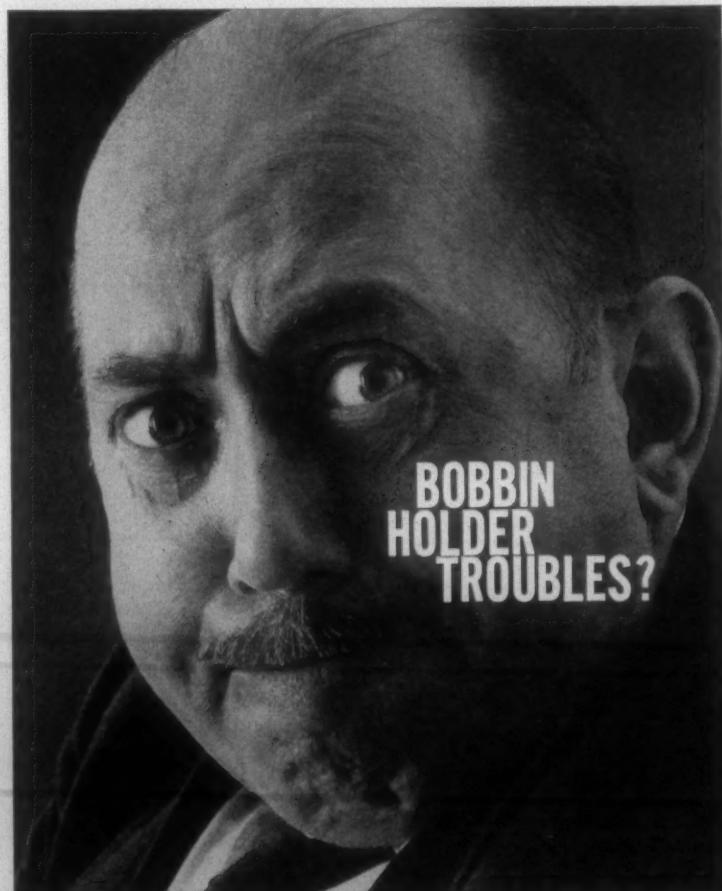
duced loom stops, thus less lost production; improved quality with less labor.

American Moistening Co. had on display a prototype unit of a new loom cleaning arrangement involving the use of suction cleaning. Still in the experimental stage, the arrangement is based on a combination use of suction cleaning on one side of the loom, and a gentle flow of air blowing toward the suction outlet from the other side. A gutter extends the width of the loom directly beneath the drop wires. A gentle flow of air carries lint and size along this gutter to the point where it is picked up and collected by the suction outlet. The arrangement is reportedly still six months or more from production.

American Moistening also had on display its standard AMCO helicline loom cleaner supported from the floor; its twin propeller fan ceiling cleaner; its low voltage track roving frame cleaner; its Modulating Interrupter humidity control for eliminating fog and improving over-all quality of spray; and the Aero-Miser water pressure type atomizer.

American MonoRail Co. had on display a new loom cleaner mounted so that the cleaner heads travel closely over the front and back of the loom. The heads send out intermittent currents of air directed at opposite angles to set up a fluttering action in the warp yarn, thereby preventing lint accumulation. Direction, speed and velocity are all adjustable.

Cited as the chief advantage for American MonoRail's roving frame cleaner is the fact that when one frame stops, the air toward the roving is immediately cut off regardless of the position of the cleaner. This is designed to prevent



Bobbins falling off the creel? Yarn stretching and breaking because of inferior bearings? Limited to one size bobbin? Labor costs increasing due to excess creeling time?

Bendix offers *quality* bobbin holders that correct all these troubles. Both the Bendix® Spin Master (toggle) and Eclipse (spring) type bobbin holders are now offered with various bolt dimensions and thread sizes *that are interchangeable with your present installation*. Production losses can be kept to a minimum during change-over.

If you need or plan a replacement program, be sure this time to specify Bendix. The final cost is less.

Bendix-Elmira

Eclipse Machine Division—Elmira, New York

Bendix
CORPORATION

Odell Mill Supply Co.,
Greensboro, N.C.
North Carolina • Virginia

Export Sales:
Bendix International
205 E. 42nd St., New York 17, N.Y.

Greenville Textile Supply Co.,
Greenville, S.C.
South Carolina • Georgia
Alabama • Tennessee

FURNISHED AS ORIGINAL
EQUIPMENT BY LEADING TEXTILE
MACHINE MANUFACTURERS



Rodney Hunt exhibited its newly designed rapid bleaching range for continuous open width bleaching.

breaks, doubling and stretch while the cleaner travels on to resume action over the next operating frame.

Also shown was MonoRail's vacuum type spinning frame cleaner designed to cover as many as 30 frames eliminating floor lint, improving yarn quality, reducing contamination and preventing accumulation on all ceiling equipment. The cleaner automatically travels to the stationary vacuum cleanout box which strips the exposed lint on the screen of the traveling unit. The door closes as it passes the stationary cleanout box nozzle and it continues on its round.

Also drawing considerable interest at Atlantic City were the complete lines of cleaning equipment by The Bahnsen Co. and Pneumafil Corp.

Finishing

Labeled as most promising in the wet finishing field was the new Hunter Pressure Lok high temperature wet processing machine displayed by James Hunter Machine Co. A joint development of James Hunter and Becco Chemical Division of Food Machinery & Chemical Corp., the pilot unit shown at Atlantic City is designed for the continuous bleaching of open width goods at high temperatures in a matter of seconds. It will handle fabrics 12 inches wide and by means of compounding the seals, it is capable of processing fabrics through saturated steam atmosphere at 50 pounds pressure, or equivalent to 297° F.

The Hunter Pressure Lok is a simple roller conveyor system, with the rolls being carried on a rack contained in a cylindrical autoclave. An internal dance roll controls the tension on the fabric. The seal itself features a top roll consisting of discs riding on a shaft exerting pressure on a solid metal lower roll. The discs have a tolerance on the shaft to permit passage of seams. This permits virtually continuous pressure since the pressure drop at any disc is only momentary. It immediately reseals itself.

While the pilot unit was constructed specifically for the bleaching of open width goods, Hunter envisions a similar adaptation of the Pressure Lok to the high temperature dyeing of hydrophobic fibers. If successful it could result in a two-step system from greige to finish dry in four to five minutes, Hunter believes. This would include desizing, caustic application, bleaching, scouring and drying. The cloth would be desized, washed, saturated with an alka-

A. T. M. E.

line hydrogen solution, squeezed to 80-100%, passed through the pressure reaction chamber, and washed and dried.

It is not known at this point how much pressure can be applied to the seals, or how practical the use of compounded seals might be. The advantages lie in the fact that a shorter reaction time means less cloth in the system; considerably less floor space is required; chemical failures would be detected immediately; the cloth could be kept under slight tension warpwise, as well as being open width, thus eliminating the fine wrinkles known as memory wrinkles; and there would be greatly reduced maintenance.

On display for the first time in this country was a compact finishing range developed by Proctor & Schwartz in conjunction with its foreign affiliate, Artos Maschinenbau. The range consisted of the Proctor Padder with its exclusive manual setting of the squeeze rolls to the most effective relative position for any padding operation. The Proctor Float Dryer, which was used as a predryer but can also be used as an intermediate dryer, a shrink dryer or for special drying applications, supports the fabric by air, allowing maximum drying while at the same time eliminating marks and wrinkles. This was followed by a new Proctor Universal Tenter designed for curing and heat setting as well as drying. Improved air circulation and distribution is achieved in a low profile housing. It also features a new pin, clip or combination pin-clip tenter chain designed to handle and guide all fabrics at high speeds with gentle care. Clips are attached to the chain with one screw, and can be removed without disturbing chain tension.

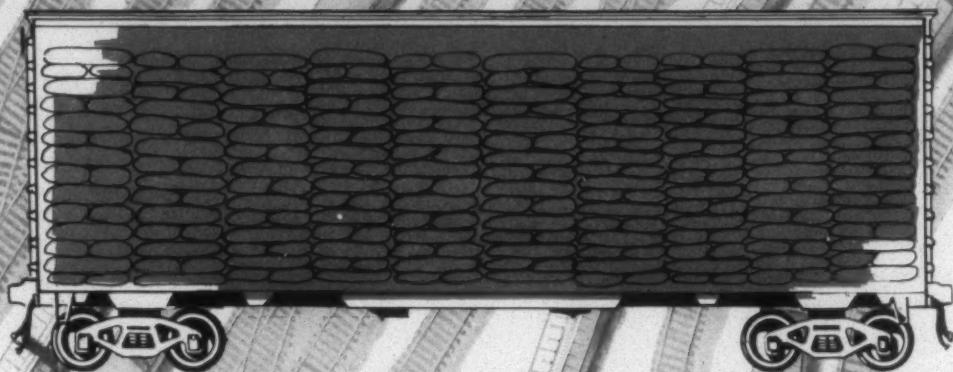
Next in the range is the Proctor Continuous Rotary Polymerizer. A unique combination of conduction and convection heating and a novel reel-like arrangement for cloth travel allow from 40 to 880 yards to be processed in one compact unit. It was pointed out that it is the only fixed machine with variable holding capacity. Cloth is stored at full width. Minimum contact with guides eliminates marks and wrinkles.

Turbo Machine Co. introduced three new pieces of equipment at Atlantic City—the Turbo Cross Shearer for the carpet industry; the Turbo-Beard Spreader Steamer for tubular knitgoods; and a rotary hosiery dyeing machine, Model 12-RD-60.

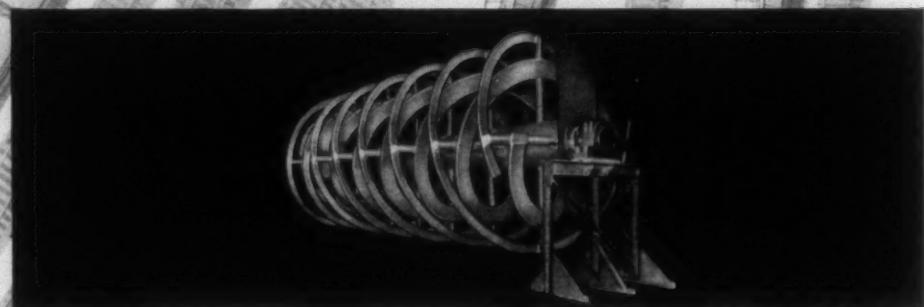
The new Cross Shearer for looped and cut pile carpets is designed for shearing across the carpet width instead of length-wise. Carpets in any width up to 18 feet, backed or unbacked, can be sheared cleanly and evenly in one pass without extra handling operations, Turbo points out. The machine has two shearing heads, one operating in each direction back and forth across the carpet. The machine can be used for step-advance, utilizing the 60-inch shearing heads. Special tensioning devices and a unique vacuum table assembly hold the carpet firmly while being sheared. The vacuum table assembly also prevents the pile from being crushed. The suction created by the vacuum assembly is against the back of the carpet. There is no pressure on the pile surface. The face of the carpet is kept clean by a heavy exhaust.

The Cross Shearer has heavy duty shearing heads. It uses five helical blades instead of multiple spiral blade inserts. The heads are easily raised for honing and sharpen-

now you can have



starch uniformity by the carload



from the world's largest blender

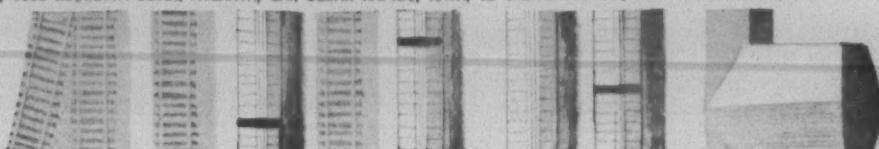
New Penick & Ford Blender ensures production quantities at pilot plant tolerances

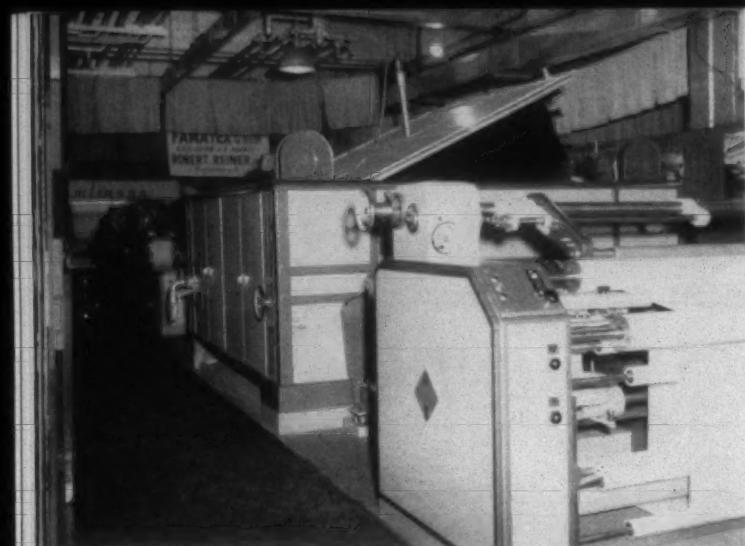
The big advantage of having your corn starches mixed in the world's largest blender is not size of batch, but the perfect starch uniformity you get . . . up to 60,000 lb. with one bag exactly the same as the next. The blender is part of Penick & Ford's new starch derivative plant

which is designed to deliver corn products of improved quality and precise uniformity. With its new facility, P & F can offer industrial starch users production quantities to exact customer specifications, no matter how large or small the order. Call

PENICK & FORD, LTD.
INCORPORATED

750 THIRD AVE., NEW YORK 17, N. Y.; 1531 MARIETTA BLVD., ATLANTA, GA.; CEDAR RAPIDS, IOWA; 18 CALIFORNIA ST., SAN FRANCISCO 11, CALIF.





This Farmatex single layer tenter shown by Robert Reiner is designed for the tentering, drying and heat setting of any woven or warp knit fabric of natural and synthetic fibers.

ing of the blades without removing them from the machine. Depth of cut and cutting speeds are easily adjustable.

The Turbo-Beard Spreader Steamer for tubular knitgoods has a patented spreading and feeding mechanism that overfeeds the fabric to the steaming zone for maximum shrinkage. By feeding rather than pulling the fabric through the steaming zone, the machine eliminates bowing which causes wales. The fabric is in full contact with the feeding mechanism, top and bottom, and side to side, as it moves into the steaming zone. Tubular fabrics up to 54 inches wide can be processed in the machine at speeds up to 25 y.p.m. Single, double or triple ends can be handled.

The company's new rotary hosiery dyeing machine eliminates all gears and bearings within the vessel. By having the drive on the outside of the tank, it isn't necessary to disassemble the equipment for repairs or replacement of parts. The machine is available in a wide range of capacities, from 4 to 250 pounds per batch. It is completely enclosed by stainless steel cover with a sliding-type door. An overflow is placed the full length of the tank at the rear to permit flushing off all scum and dirt from the surface of the liquor. The machine is equipped with quick-opening stainless steel drain valve, water inlet connection, dye feed funnel, draw-off spigot, thermometer and water gage. Steam for heating the bath is admitted through stainless steel perforated pipes, properly arranged to insure uniform heating throughout.

Turbo has also developed a new 1,000-pound capacity Fiber Setter, Model FS-1000, for processing synthetic fibers in skeins, on bobbins or as sliver. The new machine, with a cylinder or shell six feet in diameter and 10½ feet long, has more than three times the capacity of the company's other models. The basket carrier is mounted on the door and moves into the cylinder automatically at the push of a button. During processing, the basket can be rotated or oscillated, thus eliminating the need for a separate bulking operation. Pressure or vacuum cycles in any combination may be used. The machine is capable of 80 pounds psi. Steam is produced in the cylinder by means of a boil-off. When processing is completed, the door opens automatically and moves out of the cylinder on the trolley to the unloading position. The basket rotates at the push of a button for unloading fibers on conveyor, truck or table. The equipment requires 17x26½ feet of floor space.

Drawing considerable attention at Atlantic City was the

A. T. M. E.

Standfast patent continuous molten metal vat dyeing process. These machines are manufactured by Mather & Platt Ltd. under license from Standfast Dyers & Printers Ltd. of Lancaster, England. The feature of the process, as its name implies, is the passage of fabric through a molten metal alloy. There are two basic methods of application. Under system No. 1 for leuco dyeing, dry prepared cloth is guided over steamheated cylinders to the dyebath. The small capacity dyebath contains leuco dye liquor floating on the surface of a molten metal alloy in a U tube of the dyeing machine. In its short passage through the dyebath the fabric absorbs the dyestuff, excess is squeezed off by the pressure of the molten metal as it passes down through the entrance leg of the U tube and emerges through a salt bath on the exit side. It is during this passage through the molten metal that even dyeing and fixation takes place. Metal temperature, dye liquor temperature and level are automatically controlled. From the salt bath the fabric is successively rinsed, oxidized, rinsed, soaped and rinsed as it passes through an eight-box after-treatment range. The system is said to be very suitable for fabrics made from soft twisted yarns.

A pigment pad-wet develop system is used where maximum penetration is needed on fabrics of densely woven construction or tightly twisted yarns. In this system a padding mangle is added before the dyeing machine. After passing over the preheating cylinders, the fabric is padded with pigment dyes supplied under controlled conditions to the pad mangle trough and passes directly from the pad nip through the dyebath of the dyeing machine which contains the desired reducing chemicals. Due to the pressure exerted on the fabric by the mobile molten metal, good pick-up is obtained so that full reduction and fixation of the dyestuff takes place during its passage through the metal. On emerging from the salt bath, the fabric is after-treated the same as in the leuco dyeing system.

The system can also be used for dyeing yarns and tapes, each calling for a variation of the No. 1 system incorporating specially adapted machinery.

The cloth speed depends on the depth of shade required and the type of cloth. Speeds vary from 40 to 50 y.p.m. on heavy, dark shades. A lab size unit is supplied for trial runs with experimental color runs.

Rodney Hunt Machine Co. featured a new model bleaching range designed to demonstrate Du Pont's new rapid bleach process, a fast bleaching process that incorporates the caustic pre-treatment in the first J-box. The process can be adapted to any continuous or semi-continuous open width system. Advantages claimed for the process are that it cuts cloth storage time to as low as eight minutes in each J-box; medium and heavy weight fabrics can be bleached with improved quality; the whole process is simple, compact and continuous, and reduces mechanical handling operations. The model on display will be installed at Du Pont's Wilmington, Del., laboratory for demonstration purposes.

Rodney Hunt also had on display a new ten-ton padder featuring a wood-fiber roll to provide a blotter effect at the nip, thus adding moisture absorption. A direct acting air cycle for bearing pressure, and a simplified provision for removing the rolls are other features of the unit.

Venango Engineering Co. had on display its new Model

A. T. M. E.

100-RD-59 rotary dyeing machine which eliminates all internal gearing and internal bearings. The cylinder rotates on heavy duty ball bearing pillow blocks mounted on the outside of the tank. The stuffing boxes at either end of the tank are packed with Teflon to prevent leakage around the shaft. All parts of the machine coming in contact with dye liquor are of Type 304 stainless steel. Steam connections are made at one end of the tank instead of underneath the tank. A newly designed drive consists of a right angle Syncogear motor, geared to the cylinder shaft. The reversing mechanism is all-electric with a reversing cycle adjustable from 0 to 30 minutes. The unit is made in 10, 25, 50, 100 and 200-pound sizes.

In the only display of equipment for screen printing, Societe Alsacienne de Constructions Mechaniques exhibited an automatic self-propelled carriage for screen printing on tables. At a production rate of eight prints per minute, the carriage moves from check to check—or every other check if required—the screen goes down, the scraping is done, the screen comes back up and the carriage moves to the next position, all automatically. In its return from the end of the table, the carriage moves at a speed of 60 y.p.m. One unskilled operator can run two or three tables, S.A.C.M. reports, and the unit can be fitted to existing tables.

Morrison Machine Co. had on display its new open width washer featuring the company's special serpentine counterflow principle designed for more uniform scouring from side to side. It embodies five-inch diameter rolls with individual motor drive on each nip. Morrison also displayed for the first time its new small Williams unit combined with a high level pad. The unit on display was a 60-inch model with $\frac{3}{16}$ -inch stainless steel rolls.

In the dry finishing field, the David Gessner Co. introduced its new Franklin Shear to supplement the Gessner line of high torque nappers and decating machines. The new machine is equipped with rigidly mounted shear revolver rotating in anti-friction bearings; a micrometer adjustment knob for setting the depth of shearing cut calibrated in thousandths of an inch; a movable cloth rest which can be operated electrically or automatically for seam jumping; raising brushes for each of the four shear sections; a variable speed drive for these raising brushes to permit the operator to set the brushes to the exact surface speed of the cloth in yards per minute; electronic torque, cloth tension control; photo-electric seam jumping devices; and oscillating revolver and high speed steel ledger blades. The unit was also equipped with a flock housing for the revolver and all brushes, which are brought into central conjunction to which the mill connects its vacuum system.

Robert Reiner Inc. had on display its Famatex high production single layer tenter for the tenting, drying and heat setting of both woven and warp knit fabrics of natural and synthetic fibers. The Famatex's low and compact housing with a total height of only five feet five inches facilitates the operation of the frame. The air is blown onto the fabric by nozzles from top and bottom over the entire width. Wide doors in each section permit easy inspection and maintenance. Screens filter out the fluff carried by the air stream. A top lifting device cuts the downtime for cleaning and maintenance to a minimum. A special feature of the



The Turbo-Beard spreader steamer for tubular knitgoods features a spreading and feeding mechanism that overfeeds the fabric to the steaming zone for maximum shrinkage.

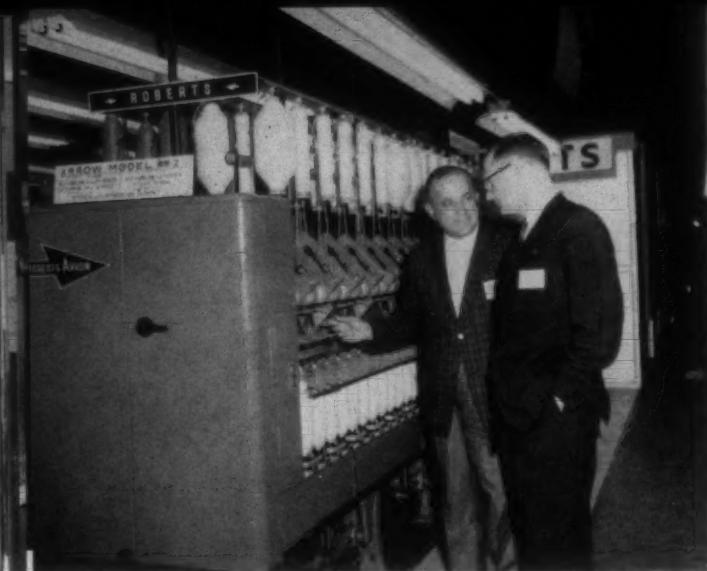
Famatex is its pin-clip chain link. The chain glides on strips of graphitized, self-lubricating material. This feature does away with soiled fabrics and cuts down on power consumption, Robert Reiner reports. The frame operates at speeds up to 250 y.p.m.

Ateliers Raxhon, Belgium, demonstrated its monocylindrical shearing machine. The unit is equipped with a special suction blade holder for cooling the spiral blades of the cylinder and the female blade. This cooling device is concentrated at the cutting place producing an important depression which raises the fibers of the material so that they reach the shearing system in the best possible condition for obtaining the most efficient shearing. The suction also removes the flocks and cleans the blades of the cylinder.

The shearing system is provided with all the necessary micrometric settings to provide for maximum precision in shearing. The shearing cylinder is equipped with 20 concave spiral blades bedded in large roller bearings. The cylinder turns at a speed of 1,800 r.p.m. The main drive is made up of a group of moto-speed variators allowing fabric speeds of 0 to 60 yards per minute.

David Gessner also had on display its 30-roll double-acting Hi-Torc napper for general napping. The Hi-Torc features the Gessner torque drive designed to provide maximum torque or napping energy required for any fabric. By the adoption of the hydraulic pressure system drive, combined with gear driven worker rolls, cloth speed, cloth tension, pile energy and counterpile energy are independently controlled and accurately indicated. Pressure gages indicate the torque of the worker rolls and show when enough torque is being transmitted to allow the napper rolls to work in optimum napping range for different fabrics. A pressure regulated feed roll system is said to insure the carrying of the cloth through the machine at a known speed and tension. Varying the speed of the worker rolls by varying the torque has made it possible to retain all the advantages of both the belt driven and gear driven worker roll machines without any of the disadvantages, Gessner reports. Machines are furnished with constant cloth speeds of from 30 to 55 yards per minute and in working widths of 60, 72, 80, 96 and 100 inches.

Woonsocket Napping Machinery Co. demonstrated two models of its napping machinery. Model 1035 is a 20-roll unit designed for the napping of all types of knitted syn-



This Model WM-2 36-inch worsted system spinning frame was exhibited by the Roberts Co. The unit is said to be especially suitable for coarser knitting yarns.

thetic pile linings, floor coverings and crib blankets as well as all types of tubular fabrics made from synthetics, cotton or wool. New features include: gear-driven ball-bearing napper rolls; ball-bearing carrier rolls; P.I.V. controls for napping energy; and variable cloth speed driven by a P.I.V. with a range from 10 to 35 yards per minute over the cylinder. The unit also includes a P.I.V. controlled variable speed feed roll which governs the tension of the cloth on the machine as well as driving a spreader roll that is especially valuable for the edges on slit fabrics.

The company's double action napping machine with 36, 30, 24 or 20 rolls features the Woonsocket triple action cloth control. Selective cloth speed is from 15 to 60 yards per minute depending on the condition of the cloth and desired results. Tension adjustment for pile and counterpile control are made by knob control.

Tomlinsons (Rochdale) Ltd., Rochdale, England, represented by Atkinson, Haserick & Co., demonstrated its Auto-Zero napping machine which it claims is the world's most modern. The Auto-Zero control is said to predict the point of practical zero napping, i.e., the instant when the true speed of the card roller points coincide exactly with the



Davis & Furber's Model H Simplex wool spinning frame features a new ballooning ring and a new yarn tension control.

A. T. M. E.

surface speed of the cloth. Speeds of 50 yards per minute are reported for the unit. Also included on the demonstration model was a Shirley analyzer which provides an instant and positive measurement of the work being done by the napper clothing. Three models of the napper are available, the 30/AZ Mark III Series 2 for general napping from cotton blankets to rayon knitwear; the 30/AZ Mark III Series 3 with reinforced drive and bigger power unit for heavily napped knitwear; and the 36/AZ Mark III Series 2 for close dense napped cotton flannels.

Cosa Corp. had on display a German napping machine for cotton, wool and knitted fabrics. Produced by Kettling & Braun, the unit is said to have an infinitely variable fabric speed up to 115 feet per minute. Infinitely variable speed regulation of the card roller series is also provided. A napping speed counter guarantees high performance of the unit. Control panels are mounted on both sides of the napper to insure ease of operation. The V-belt drive has a central tension arrangement that is said to prolong the life of the belts. The napper's raising drum and card rollers are said to be precisely balanced and to feature faultless concentric running.

Woolen & Worsted

Roberts Co. exhibited its new Roberts-Tematex Para-Drafter for the first time. The company's Arrow WM-1 narrow worsted spinning was also shown. The Para-Drafter is designed to pin, parallelize and draft worsteds and long fiber synthetics. New features incorporated in the drafters are: hydraulic weighting of the delivery rolls; hydraulic lifting of the head for faller bar inspection; simple changing of draft and pressures; complete stop motion with indicator board to show location of stoppage; shock absorbers for faller drops; gradual introduction of fallers into sliver; and eight-inch wide pinning field. One of the units was the AutoEvener which combines a single head single delivery ParaDrafter with an electronic-mechanical control unit to correct sliver entering within a weight variation of $\pm 20\%$ into a delivered sliver with a maximum variation of $\pm 1\%$. Also exhibited was a ParaBlender which combines two ParaDrafter heads with a simple arrangement for combining and sandwich blending finished slivers onto a central ball delivery. This provides a large number of doublings plus melange blending of a high number of slivers.

Roberts' WM-1 wool spinning frame incorporates a new version of the Permaset drafting system which can be run either as a four-roll full control system or as a three-roll adjustable system. An improved suction cleaning arrangement was also exhibited.

Whitin Machine Works' new entry into the field of worsted combing, the American Comber, was shown in operation at the company's booth. The unit is said to offer production increases up to 400%. It produces 75 pounds per hour from its six-head delivery at 125 n.p.m. The combing is said to be equally efficient in combing wool tops and recombining straight wool or blends of worsted and synthetics. It removes a greater percentage of short and imperfect fibers and foreign matter and reduces maintenance.

A. T. M. E.

The new comber closely resembles the Whitin Super J cotton comber and adopts many of that machine's features such as motions, setting arrangements and design elements.

Whitin also displayed its new Flex-Spin wool spinning frame utilizing balloon control rings and a variable speed drive to obtain better yarn quality and increased production. The frame incorporates a number of new features. Among them are: a new variable speed drum drive; longer traverse; simplified spindle drive; and an anti-friction spindle with new hand brake.

A new reciprocating motion applied to both ring and spindle rail permits traverses up to 16 inches with a minimum yarn tension variation. As a result, up to 20 ounces of soft knitting yarns and up to 32 ounces of yarn for weaving can be wound on the bobbins. Further efficiencies are said to be secured in the succeeding processes of winding, coning and spooling. The unit is available in gauges from 4 1/2 to 7 inches.

Platt Bros. Ltd., England, represented by Atkinson, Haserrick & Co., showed its four-height high speed tape condenser. The versatile unit is said to give good performance on every class of work from heavy carpet and rug wools to the finest Saxonies. Motion shaft speeds of up to 600 r.p.m. enable the achievement of the full productive potential of carding sets on coarse work. The unit produces eight half length bobbins of 12 yarns each and incorporates deep grooved dividing rollers, internal surface

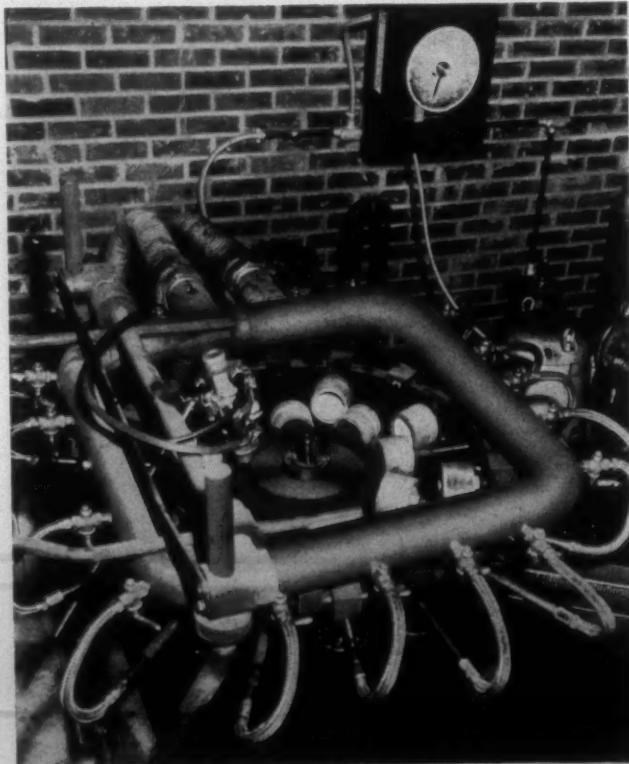
drum drive, multi-speed drive, traversing creel, centralized lubrication, and is equipped for pneumatic waste removal.

The Magnum large package ring spinning frame for wool was exhibited by Ateliers H. Duseberg-Bosson. The frame is said to be particularly adapted for the treatment of coarse count yarns for carpets, blankets, etc. False twist tubes are designed to obtain the highest drafts and are specially adapted to the kind of materials to be spun, allowing the roving to be fed without any device. The false twist tubes are fitted on a rail with the traverse motion to reduce the wear of the pressure rollers in contact with the thread. A set of chain wheels allows the speed to be changed. The spindle rail is stationary while the ring rail travels up and down to utilize giant tubes (more than 15 3/4 inches in height).

The frames are built with large spindle gauge capable of producing heavy packages by using condenser bobbins with wide cheeses. Spindle gauge is determined according to the number of ends of the condenser bobbin, its length and according to the twist of the yarn to be produced. The spindles are on roller bearings and are fitted for bobbins of more than two pounds of yarn. They are equipped with hand or foot brakes according to the customer's requirement.

A speed of 175 n.p.m. and a production increase of 20% were claimed for the new PERL comb demonstrated by Atkinson, Haserrick & Co. The unit is produced by Societe Alsacienne de Constructions Mechaniques, France. It has an operating width of 13 inches and a combing cylinder with 19 needle bars. Double stripping of the top comb

.... add YEARS to your GEARS!



MEMBER AMERICAN GEAR MANUFACTURERS ASSOCIATION

★ Now you can have heat-treated steel gears giving FOUR TIMES more life than similar gears which are untreated or poorly treated.

★ The new completely scientific heat-treating installation shown here, assures uniformly hardened gears up to 17" diameter by 6" face. The gear is rotated in electronically controlled radiant heat, thus providing 100% uniformity of treatment from gear to gear as well as from tooth to tooth. Only the web and bore remain soft, insuring a minimum of distortion.

★ Get information or quotation about the Ferguson Gear process that will save you trouble, time and money. Contact your nearest Ferguson Sales Engineer, or write direct to Ferguson Gear Company, 511 Airline Avenue, Gastonia, N. C.



FERGUSON GEAR COMPANY

GASTONIA, NORTH CAROLINA • TEL. UN 4-2626

SALES OFFICES { GREENSBORO, N. C. B. T. GLADDEN
GASTONIA, N. C. B. W. LYNCH TEL. IVANHOE 3-2462 DENVER, N. C.
GREENVILLE, S. C. HAROLD H. HARRISON TEL. CEDAR 2-4195
LA GRANGE, GA. JOHN FERGUSON TEL. 5040, P. O. BOX 486
SAVANNAH, GA. HARVEY D. BLACK TEL. ADAMS 6-9479 2014 Florida Ave.



Sant' Andrea Novara's rectilinear wool comb, Model PS, with 18-inch combing width, operates at 160 n.p.m.

with an automatic opening and built-in suction device is featured. The comb has no burr knife. Feeding is by twin rollers. A new ball creel for worsted operation features preloading on two carts which are merely rolled in the back of the machine to creel it for three shifts. Handling and downtime are said to be substantially reduced. Automatic continuous noil removal can be installed with a conveyor belt running through the bases of a set of combs.

Automatic levelling of two slivers of worsted or synthetic fibers simultaneously is said to be accomplished by the Autocalibreur autoleveller gill box introduced in this country by Stellamcor and produced by La Duranit, Belgium. The principal advantage offered by the unit is that the roving can be levelled as near as possible to the spinning. A specific thickness of the sliver fed is measured by a monitoring roller that can level variations of up to 25%. This information is fed to a mechanical memory; the transcript of it is operated by a scanning device in time to allow the measured sliver to reach the draft zone. The change is effected by the P.I.V. gearbox. A mechanical differential compares the speed of this gear with the speed of the P.I.V. gearbox and acts on a hydraulic valve operating a jack that controls the change gear.

The Record Drafter, La Duranit's non-intersecting gill, is said to have a delivery speed range of 90 to 130 y.p.m. and to produce up to 220 pounds per hour. Six slivers of 21 to 56 grains per yard are produced. In operation, a hydraulic roller weighting arrangement with synthetic covered pressure roller is driven, leaving the drafting roller adjustable. There are only 27 fallers in the unit. The draft is from 7 to 10. The new gilling equipment is said to be suitable for wool, synthetic fibers, polyester and polyamides as well as colored wool and blends. They can also be used for the new semi-worsted system.

Higher spindle speeds, reduced ends-down and the use of larger bobbins are cited as advantages of a new ring frame for condenser yarns demonstrated by Ateliers Houget, Belgium. Designated Type R.T.F.I., the unit is equipped with 44 spindles. The gauge is seven inches, the ring diameter is 5½ inches and the lift is 17½ inches. The frame is equipped with special R.T.F. spindles to reduce spinning tension and make possible higher speeds. Spindle speed is 5,050 r.p.m. and the maximum front roller speed is 400 r.p.m. With the 5½-inch ring a net bobbin weight of three pounds is obtained.

The frame is being built with ring diameters ranging from

A. T. M. E.

2¾ inches to seven inches. The maximum bobbin weight obtainable is five pounds. The speed varies from 4,000 to 14,000 r.p.m., depending on the ring diameter. A stationary spindle rail and moving rail are featured. A variable speed motor drives the frame, keeping the balloon tension and the spinning tension constant. The twists can be set by a variator without changing any gears, and can be modified in the ratio of 1-to-4.

The speed of the frame can be set by the motor so that no gears and no pulleys have to be changed, with the exception of the draft gear. False twist tubes situated between the top rollers and the front rollers are equipped with the false twist finger. The frame stops automatically for doffing and creeling.

The Model Ps rectilinear comb was exhibited by Sant' Andrea Novara, Italy, combing wool at 160 n.p.m. U. S. sales for the unit are handled by Ernest Frankl Associates. Working speeds to 175 n.p.m. are possible on the comb without the burr knife, the company said. The unit is equipped with a feeding creel for 24 large bobbins. Weight for a single bobbin is about 17½ pounds—total charge of the feeding creel is approximately 42½ pounds. A circular comb is used with two half laps, each equipped with ten needle bars. Diameter of the half lap over the pins is 6½ inches. The needle field width is about 17½ inches. The burr knife enters the half lap between the 15th and the 16th needle bar. The top comb is pinned over a width of approximately 18½ inches.

A one-sided direct spinning frame for worsted and man-made fibers was demonstrated by A. Carniti & Co., Italy, represented by Stellamcor. The frame has a stationary spindle rail and is fed directly from cans. The unit had a gauge of 4½ inches with a ring diameter of 3½ inches and a bobbin length of 12 inches. It features a six-roll double apron high draft system. Draft range is from 50 to 200, and two drafting ones are featured. Although a one-sided frame was shown, the company reported that it can be delivered either one-sided or two-sided. The special design for a high traverse and large packages is said to permit a working speed never before attained with a similar ring diameter. The gear end is entirely enclosed to protect the drive gears from dust and lint and insure smooth operation. All controls and drives have anti-friction bearings throughout so that a centralized lubrication system is not necessary. Means have been provided for the instant reversing of the spindle rotation when right hand and left hand twists have to be obtained. This is done by shifting the constant and twist gear. Large diameter rings and bobbins up to 16 inches can be used on the frame. At a spindle speed of 8,000 r.p.m., the display unit was producing 24's yarn at 70 f.p.m. using 30% Dacron and 70% wool.

The HMG Auto-Gill with weight control and automatic can delivery was on display in the booth of Texplant Corp. The Auto-Gill is produced by Hanseatische Motoren-Gesellschaft, Germany. It features a delivery speed of about 55 y.p.m., corresponding to approximately 6,000 faller drops. The pin bars are driven by chains instead of screws and have a pitch of 3/8-inch. When the pins enter the sliver, the chains pass over chain wheels. Thus the pin bars move over an arc which then levels off into a horizontal line. The cranks on the end of the bars are guided

A. T. M. E.

in such a way that the pins are kept upright when beginning to move into the sliver. The pins are raised into a vertical position just before they pierce the fibers, the distance between the rows of pins remaining constant.

In the exit of the pins from the sliver, the chains continue to be guided by the chain wheels, but because the diameter of these wheels is small, the pins leave the sliver instantly, making it possible to keep the distance between the last pin bar gripped and fibers and the drawing-off roll very small. The pins are kept upright when leaving the sliver.

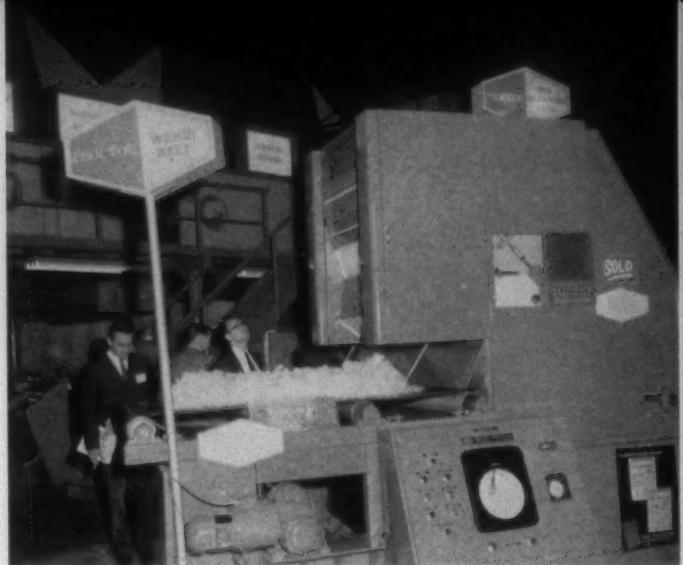
The unit also featured mechanical measuring with electro-hydraulic amplifier for adjusting the necessary draft. The feeding speed remains constant and the delivery speed is controlled by a P.I.V. gear.

N. Schlumberger & Cie of France demonstrated its Model PB 25 L rectilinear worsted comb. The unit is normally fed from six double-end cans 24x47½ inches but can also be fed from bobbins or from smaller cans. Working width is 16 $\frac{9}{16}$ inches and the normal speed is 125 strokes/minute. It can be increased up to 145 strokes, burr knife out of action, with certain types of material. The circular comb is made of two segments, ten bars each, pinned on 17 inches. A burr knife of small inertia is disengaged by means of a cam fixed on the frame. The front comb is pinned over 18½ inches. Cleaning is realized by means of two blades, one on each side. The unit is used in combing and in recombining sets. It is also used in the combing of man-made fibers, flax, tow, ramie, etc.

A second Schlumberger unit was a finisher intersecting gill box equipped with draft regulator. The unit has 60 fallers with 34 in working position. Faller speed is from 1,000 to 1,200 strokes/minute. Delivery speeds of 65 to 110 y.p.m. are cited for the unit. Drafts range from 6 to 12 depending on the type of material being processed. Depth of the pinned area is 5 $\frac{11}{16}$ inches. The fallers are provided with pins on a width of 8 $\frac{11}{16}$ inches. The finisher is normally provided with a creel for emptying cans, but the unit displayed was provided with a creel for ball-feeding, which enables also can feeding. It delivers balls 18 inches in diameter and 16 inches long and is equipped with an automatic doffing device.

Spencer & Halstead Ltd., Yorkshire, England, demonstrated its wool blending system. It is composed of a wool opener, the Vortex oiling unit and a rotary spreader. Emphasis was placed on the Vortex oiler. The unit is located at the outlet of the opening machine where the fibers, still in an "airborne" condition, are caused to swirl around a centrally located atomizer. The oil enters the atomizer by gravity feed and is atomized by a high pressure air blast fan. The pillar type rotary spreader blows the opened wool out a revolving head with two openings. This results in a thorough blending of the fibers on the floor below.

Mitsubishi International had on display a pot type air spinning frame produced by Hiroshima Precision Machine Works, Hiroshima, Japan. The unit was spinning 100% wool with a spindle speed of 18,000 r.p.m. The draft was 48 and the yarn count 42.5 (English worsted system). Twist multiple was 14.5. The unit is said to produce a soft, highly elastic yarn.



Proctor & Schwartz demonstrated its Model 729 blending feed designed to automatically weigh and proportion various baled stocks into a process.

In operation, the sliver emerging from the drafting rolls is inhaled into the sliver inhaling tube. The tube is designed to suck a sliver by eddy air, while inserting tentative twists into it. The sliver delivered from the tube, now tentatively twisted, forms a yarn, the end of which is sucked into a revolving pot. The yarn attaches itself to the inside wall of the pot by means of centrifugal force and then is definitely twisted. The degree of twist is determined by the feeding speed of the front roller and the rotating speed of the pot.

By the vertical traverse of the yarn-feeding tube inside the pot, the yarn coming from it adheres to the inside wall of the pot, forming the required layers of yarn on the wall. When a predetermined amount of yarn has been fed into the pot, the rotating speed is gradually lowered to the rewinding speed. As the bobbin rail descends to the correct position, the front roller stops delivering yarn and a bobbin is inserted into the pot. The yarn coming from the end of the yarn-feeding tube is hooked at a cut-out in the bobbin holder. The pot continues rotating and in so doing winds the yarn onto the paper bobbin. The bobbin rails are elevated and inclined forward when the yarn has been fully wound onto the bobbin. The bobbin is then ready for doffing.



The Mitsubishi pot type wool spinning frame is designed to operate at speeds from 16,000 to 18,000 r.p.m. and to produce a soft yarn.

S. C. Textile Manufacturers Association

Holds Annual Meeting At Sea Island, Ga.

KEYNOTE of the South Carolina Textile Manufacturers Association meeting at Sea Island, Ga., May 26-28 was the future, both of products and the men who will make those products. For example, a prediction that the day of specialized fibers is coming was made by Dr. Douglas W. Hill, director of the Shirley Institute, Manchester, England, principal guest speaker at the meeting.

Dr. Hill said British researchers had abandoned the idea of trying to develop a single "perfect" all-purpose fiber in favor of work on specific-purpose fibers. "The field of blending natural and man-made fibers for specific properties offers a field in textiles as rich as the field of alloys is to metals," Dr. Hill declared. He pointed out that the door is just opening on countless possibilities in blending. Research indicates that various fibers can be blended to yield almost any properties desired in an end product.

Dr. Hill predicted also that automation would be restricted in textiles to individual stages of manufacture. Automation can be applied to the manufacture of a metal product, he noted, because from start to finish the material was still a piece of metal. In textiles, however, there are material changes at each stage of manufacture. No automated process of fiber to cloth could be expected for this reason, he explained. However, he said he had great hopes for continuing development of automation within each phase of textile manufacturing.

He also said he expected to see greater use of automation in management, through the use of computers, and in prod-

uct and market research. "That's just as much automation as in processing," he said.

More Young Talent

A second subject keyed to the future was the matter of attracting more young men into the industry. One of the association's key projects for the past year has been the recruitment program for the Clemson College School of Textiles. The state has been divided into districts and industry district chairmen appointed to bring the industry into the program. Activity since January has been directed primarily at staging tours for high school seniors and following up with visits and talks between prospective students and industry officials.

The program apparently is beginning to pay off. J. M. Bailey of Judson Mills, Greenville, reporting for the Clemson Liaison Committee, said applications for the school were up 47% over this time last year. According to Textile School figures, there were 42 applicants at this time in 1959. This year, as of May 14, a total of 62 high school students have passed entrance examinations.

President's Annual Report

In the president's annual report, Frederick B. Dent, president of Mayfair Mills, Spartanburg, emphasized the close relationship the industry enjoys with South Carolina's people and government. This sound relationship is "one of the major reasons why the South Carolina textile industry has continued to expand in the face of contraction elsewhere in the nation," Dent said.

"This co-operation is paying off for the industrialization of the state as indicated by a survey of the first \$164,661,000 of new capital invested in South Carolina industry last year," Dent said. "Some 82% of this money, which went into new plants and expansion of old plants, was invested by existing South Carolina industries." (The textile industry accounts for about 70% of South Carolina's manufacturing payroll.)

"The area of human relations in the textile industry of South Carolina is one to which we can point with genuine, unrestrained pride," Dent said. He said it is based on mutual respect and common purpose. "This has resulted in the lowest ratio of manhours lost due to strikes of all other industrial states of the nation. Only three one hundred-thousandths of one per cent of the total industrial manhours worked in South Carolina last year were lost due to strikes."

He pointed out that textile employment in South Carolina last year advanced 1.71%, compared with a national decline of 1.4%. He added that state figures indicate that total textile wages in the state currently are running at a rate of \$20 million in excess of this time last year.

Program highlights of the Saturday session, which was concluded with the election of new officers, was a presenta-



Robertson, McClenaghan, Dent

George P. McClenaghan of J. P. Stevens & Co., Greenville, is the newly elected president of the South Carolina Textile Manufacturers Association. He succeeds Frederick B. Dent of Mayfair Mills, Arcadia. William F. Robertson of Riegel Textile Corp., Ware Shoals, is the new vice-president succeeding McClenaghan.

tion by the American Economic Foundation, which helped prepare a booklet on the economics of the textile industry for the association. The booklet will be used in schools and in plant programs to acquaint more Americans with the workings of the free enterprise system. Giving the foundation presentation were Morgan S. A. Reichner, foundation director, and Richard S. Rimanoczy, editorial director of the foundation.

Committee reports were presented by W. F. Robertson, Riegel Textile Corp., Ware Shoals, *Audit Committee*; B. F. Hagood, Glenwood Mills and Pickens Mills, Easley, *Traffic Committee*; Charles A. Gibson, B. I. Cotton Mills, Greenville, *Unemployment Compensation and Workmen's Compensation Committee* and *Nominating Committee*; W. Gordon McCabe Jr., J. P. Stevens & Co., *Cotton Committee*; J. W. Jelks, J. P. Stevens & Co., Greenville, *Education Committee*; James A. Chapman Jr., Inman and Riverdale Mills, Inman, *Legislation Committee*; Earle R. Stall, Cone Mills, Greenville, *Report on By-Laws*; Charles R. Walters, Abney Mills, Greenwood, *Taxation Committee*; and Jack Reams, Abbeville Mills, Abbeville, *Personnel Division*.

Election Of Officers

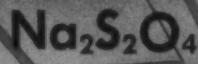
In the annual election of officers, George P. McClenaghan, vice-president of J. P. Stevens & Co., Greenville, was named president for the coming year succeeding F. B. Dent. William F. Robertson, vice-president of Riegel Textile Corp., Ware Shoals, was elected vice-president to succeed McClenaghan.

Four new members were elected to the association's board of directors, bringing the number on the board to 12. Newly elected members include P. C. Gregory Jr., Union Bleachery, Greenville; C. H. Coggin, Columbia Mills, Columbia; R. S. Small, Woodside Mills, Greenville; and Robert B. Vance, Clinton-Lydia Mills, Clinton. H. W. Close of Springs Cotton Mills, Fort Mill, was elected to serve out the unexpired term of the late Elliott White Springs. Close has been serving by appointment since Colonel Springs' death.

Re-elected to new terms were W. A. L. Sibley, Monarch Mills, Union, and J. C. Self, Greenwood Mills, Greenwood. Continuing members of the board include Walter S. Montgomery, Spartan Mills, Spartanburg; Stanley W. Converse, Clifton Mfg. Co., Clifton; Walter Regnery, Joanna Cotton Mills Co., Joanna; R. M. Cushman, Amerotron Co., Aberdeen, N. C.; and William H. Grier, Rock Hill Printing & Finishing Co., Rock Hill. Retiring from the board were Earl R. Stall, Cone Mills Corp., Greenville, and Andrew B. Calhoun, West Point Mfg. Co., Anderson. John K. Cauthen was re-elected executive vice-president of the association and Miss Julia Kennerly was re-elected secretary.

McClanahan brings 38 years experience to the office of association president. A graduate of Georgia Tech, he began his textile career as a machinery engineer with the J. E. Sirrine Co., Greenville, in 1922. He remained with Sirrine until joining Stevens in 1936. With Stevens he has held his present position for two years. Before that he had been general manager of various groups in the organization, became a director in 1949, a vice-president in 1950, a member of the manufacturing advisory committee in 1956 and a member of executive committee in 1958. He is director of Greenville's Peoples National Bank and the J. E. Sirrine Foundation.

SODIUM HYDROSULFITE



... From a veteran of more than 50 years of experience in Sulfur chemical research and manufacture ...

Tennessee Corporation's unique basic raw material position provides more complete quality control—from start to finish—and assures its customers a dependable supply regardless of availability of Sulfur, Sulfur Dioxide and Zinc.

Quality of the product TC believes to be unexcelled—94% purity, non-caking, non-dusting and outstanding stability.

Packaged for longer storage and safety in airtight steel drums (250 pounds net).

TENNESSEE CORPORATION
615-679 GRANT BUILDING, ATLANTA 3, GEORGIA

Sparkling whites

Outstanding whites

Brighter whites

Blancophor® whites

(optical whiteners)

Blancophor optical whiteners now offer textile manufacturers a complete range of desirable brightener characteristics. High bleached whites on cotton, rayon, and other cellulosic fibers can now be upgraded to *outstanding whites* by a "quick dip" as well as by conventional methods.

Blancophor GS Brands

Our newest offering . . . feature

- ✓ Substantivity for cellulosic fibers
- ✓ Blue fluorescence
- ✓ Medium exhaust
- ✓ Good leveling
- ✓ Ready solubility in water

Blancophor CB Brands

A new addition to this series . . . feature

- ✓ Outstanding stability over a broad pH range
- ✓ Blue fluorescence
- ✓ Slow exhaust
- ✓ Good leveling — can be "salted on" for even results
- ✓ Ready solubility in water

Blancophor HS Brands

The industry standard . . . feature

- ✓ Good all-round brightening characteristics
- ✓ Violet-blue fluorescence
- ✓ Slow exhaust
- ✓ Excellent leveling
- ✓ High water solubility

All of the Blancophor brighteners are compatible with the ordinary resin finishes in current use and are ideally suited for pad application.

Blancophor brighteners are available in powder and liquid form. The liquid products are

supplied in specially designed polyethylene-lined fiber drums equipped with a handy spigot. Bulk quantities can be supplied.

Samples, literature, and technical assistance are available on request. Ask at any Antara office.

From Research



ANTARA
A SALES
GENERAL ANILINE
435 HUDSON STREET.

SALES OFFICES: New York • Providence • Philadelphia
San Francisco • Los Angeles. IN CANADA:

to Reality

CHEMICALS
DIVISION OF
& FILM CORPORATION
NEW YORK 14, NEW YORK

Charlotte • Chattanooga • Chicago • Portland, Ore.
Chemical Developments of Canada, Ltd., Montreal

Georgia Textile Manufacturers Association Holds 60th Convention At Hollywood, Fla.

THE textile industry would be a lot better off if its members would quit kicking each other's teeth in and turn more of their well developed competitive skills on "outside" competition. That was the key point made by W. E. Reid, president of Riegel Textile Corp., in a speech May 20 before the 60th anniversary convention of the Georgia Textile Manufacturers Association at Hollywood, Fla.



Reid

Titling his remarks "What Is Our Real Problem?", Reid cited the continuing gains being made by other industries in markets that a few short years ago were all textile. Where these other industries "have really worked us over," he said, "has been in industrial uses. In 1947, six and one-quarter million bales of textile fibers were consumed by industrial users.

By 1959, the preliminary estimate showed that 6.6 million bales had been used. In 13 solid growth years, we, as an industry, had only been able to hold our own in the industrial markets."

These figures reflect a tragic performance on the part of the industry in general and in the industrial field in particular. Rather than turning their competitive know-how on the outside competition, producers of industrials shifted their production to household and apparel products, he pointed out.

Nor is the practice limited to industrial producers, he cautioned. The same has been true to a lesser extent in

fibers consumed in household uses. Figures show an increase of only 1,150,000 bales in this area over the years 1947 through 1959. This is the industry's most vulnerable area, Reid said, as both paper and chemical producers are training their guns on this field. "Unless tremendous efforts are made by our industry, ten years from now our record will, in my opinion, approach that of our industrial performance." He cited the development and growth of the tufted industry as an example of what the industry can and must do if it is to remain strong.

The real glowing spot of the textile industry, according to Reid, has been the apparel section. "Here we are blessed with an aggressive, dynamic, promotion-minded group of customers; people who do not believe that it is necessary for the market to shrivel and die; people who refuse to admit that *any* competition, inside or outside, is as smart and fast moving as they are.

"In 1947 they consumed 4,782,000 bales of textile fibers. In 1959, the preliminary estimate is 7,282,000 bales, an increase of 2 1/2 million bales or more than 50%. If the remainder of our industry had made such an outstanding contribution to the textile cause, textile common stocks in America would paint an entirely different picture."

This shows dramatically what can happen to an industry, he said, when it is supported by a tremendous, dynamic promotional effort. "What is our real problem? How long is it going to take us to recognize and realize who our competitors really are? How long is it going to take us, the



Baum, Jones, Forbes, McKenney, Carter, Smith

Paul McKenney Jr. of Swift Mfg. Co., Columbus, Ga., receives the president's gavel (a shuttle) of the Georgia Textile Manufacturers Association from Louis L. Jones of Canton Cotton Mills, outgoing president. Other newly elected and continuing officers include John P. Baum of J. P. Stevens & Co., Milledgeville, vice-president; T. M. Forbes Sr. of Atlanta, executive vice-president; Frank Carter of Atlanta, secretary; and G. H. (Jack) Smith of Pepperell Mfg. Co., Lindale, treasurer.



New directors of the Georgia Textile Manufacturers Association are (left to right) Frank Willingham, Willingham Cotton Mills, Macon; L. M. Woodward, Eastman Cotton Mills, Eastman; Thomas D. Bruce, J. P. Stevens & Co., Dublin; R. T. Davis Jr., Swift Spinning Mills, Columbus; Joseph J. Norton, Pacolet Mfg. Co., New Holland; and L. E. Bowen Sr., Tifton Cotton Mills, Tifton.

greatest competitors in America, to take this well developed skill and turn it on our 'outside' competition?"

Free Trade An Obsession

Still another textile industry problem touched on at the G.T.M.A. meeting was that of imports. In his remarks as the association's retiring president, Louis L. Jones Jr. of Canton Cotton Mills criticized the government's continuing obsession with free trade at any cost. The U. S., he said, is at the point of being generous to a fault with the jobs and investments of its citizens. He reiterated that the textile industry favors free trade to the extent that it benefits all competing countries, but he warned that present policies can lead only to a lowering of the standards of living in this country. Low-wage countries should realize that the best way to raise their standards of living is by raising their wages instead of exploiting U. S. markets.

He described the textile industry as the "torch bearer" in the campaign to bring a semblance of common sense to U. S. foreign trade policies. Other American industries are just now beginning to feel the damage of imports from low wage countries, and they can be expected in time to join the textile industry in demands for fair treatment for American workmen.

Election Of Officers

In another convention highlight, Paul K. McKenney Jr. of Swift Mfg. Co., Columbus, Ga., was elected president of the group for the coming year. Named vice-president was John P. Baum of J. P. Stevens & Co., Milledgeville, Ga. Baum's election places him in line to accede to the presidency in 1961. Elected as treasurer was G. H. (Jack) Smith of Pepperell Mfg. Co., Lindale, Ga.

A native of Texas, McKenney is a graduate of Auburn University. He was named "Man of the Year" in 1948 by the Columbus Jaycees, and was one of five Georgians to be named "Man of the Year" by the Jaycees in 1950. He is currently a member of the public relations committee of the American Cotton Manufacturers Institute, and has previously served the G.T.M.A. as a director, vice-president, treasurer and committee chairman. His father, who is chair-

man of the board of Swift Mfg. Co., was president of the G.T.M.A. in 1937-38.

John P. Baum, the new vice-president, is a graduate of Georgia Tech where he was captain of the 1924 baseball team. As vice-president of J. P. Stevens' woolen and worsted division at Milledgeville, he directs Stevens' woolen and worsted plants in Georgia, North Carolina and New England. Prior to joining Stevens, he had been associated with the Georgia Marble Co., Robert & Co., General Electric and Pepperell Mfg. Co.

The group's new treasurer, Jack Smith, is a native of Alabama and a graduate of Auburn where he was captain of the baseball team during his senior year. He joined Pepperell in 1929 and was named to his present position as general manager in 1959.

Board Of Directors

Elected to the G.T.M.A. board at the meeting were Robert T. Davis, Swift Spinning Mills, Columbus; Floyd C. Newton Jr., Dundee Mills, Griffin; William D. Ellis, Southern Mills, Atlanta; Joseph J. Norton Jr., Pacolet Mfg. Co., New Holland; Jack Darlington, Pine Tree Division, James Lee & Sons Co., Dahlonega; Frank M. Willingham, Willingham Cotton Mills, Macon; Thomas D. Bruce, J. P. Stevens & Co., Dublin; L. M. Woodward, Eastman Cotton Mills, Eastman; and L. E. Bowen Sr., Tifton Cotton Mills, Tifton.

\$1 Million Clemson Appropriation Included In Agriculture Bill

The Senate Appropriations Committee has provided \$925,000 for textile research at Clemson College in an Agriculture Appropriations Bill for fiscal 1961. Another \$165,000 was provided for boll weevil research at the government laboratory in Florence, S. C.

Of the Clemson appropriation, \$75,000 would be for spinning equipment at the school's textile pilot plant. The other \$850,000 would be for facilities to conduct weaving, bleaching and dyeing tests on yarn spun from test lots at the plant. The appropriation was requested by Senator Olin Johnston and was supported by Senator Strom Thurmond.

The Carolina Yarn Association Holds Its Annual Outing

GOLF AND SKEET HIGHLIGHT THE ANNUAL GATHERING



OVER 700 members and guests of the Carolina Yarn Association participated in the group's annual outing at Pinehurst, N. C., May 11-13; missed "several" putts and pigeons, but had the usual rollicking good time. Golf and skeet were the major attractions, with a few "shut-ins" engaging in bridge and gin rummy.

Golf Champs

Courses nos. 1, 2 and 3 at Pinehurst and the courses at Mid-Pines and Pine Needles were available for the 36-hole tournament and all were needed to accommodate the unusually large field. The association's golf championship was won by Bryce Holt of Industrial Rayon Corp., Greensboro, N. C., with a low net of 141. Gordon Eaves, Cloverdale Dye Works, High Point, N. C., came in with a sparkling 150 for low gross honors.

Hole-In-One

After carefully studying the wind velocity, barometric pressure, humidity and roll of the green, L. K. Eilers of the Tennessee Eastman Corp., Kingsport, Tenn., shot a hole-in-one on the 7th hole of the no. 1 course, and received a special prize for this sensational and skillful feat.

Skeet King

The skeet championship was won by Dave Long Jr., Amazon Cotton Mills, Thomasville, N. C., and the first door prize went to Bob Peacock, of American Enka Corp.

Other Winners

For the first time, the golfers were divided into classes, as has always been done with the skeet shooters. The three top winners in the golf classes were as follows: *Class A*: R. Bivins, Fred Frisell III, Chas. W. Causey; *Class B*: F. M. Wiley, E. W. Walton, E. E. Chapman; *Class C*: W. R. Peacock, Decatur Cunningham, S. C. Isley; *Class D*: H. E. Crawford Jr., George Hepworth, Houston Sharpe; *Class E*: Allen Mebane, James Austin, William Blanton; *Class F*: J. E. MacDougall Jr., Robert W. Stowe, Lewis C. Harrison; *Class G*: Russell Katzenmoyer, Joseph Russell, John Shea; *Class H*: Harold Haak, Claiborn Carr, John E. Woltz. *Class I*: James J. Johnston, James C. Senter Jr., Adolph Greenburg; *Class J*: L. Verlenden, Frank Deavers, John B. Steen Jr.; *Class K*: William G. Parnell, Frank Farnell, Louis E. Williams; *Class L*: Winfred Mitchell, Frank McCrary, S. M. Smith; *Class M*: Erskine Pharr, H. J. Marshall Jr., Harry James; *Class N*: Sam Stallings, Russell Sherrill, Thomas Witner; *Class O*: Dave Brinton, W. W. Bowman, Laton Harris Jr.; *Class P*: George Sharpe, Joseph Eble, Lee George; *Class Q*: John D. Green, William Poisson, W. H. Chadwick; *Class R*: Matt Kurtz, Lester Cutler, John Stickley; *Class S*: John C. Richards Jr., Clarence Rowe, Marvin Hobson; *Class T*: C. Berliner, John Burgio, Julius Chamberlain.

Winners in each of the four skeet classes were as follows: *Class A*: Henry Stokes; *Class B*: Joe Ballentine; *Class C*: Phillip Garrou; *Class D*: Verne Collingwood.

Members and guests were entertained at a floor show in



Anthony, Evans, Barrie, Ethridge, Jordan

Officers of the Carolina Yarn Association include James Anthony, president; Wilbur Evans, treasurer; Frank Barrie, executive secretary; Thomas Ethridge, vice-president; and Ben Jordan, secretary.

COMPONENTS for INDUSTRY



STANDARD PRODUCTS

- Bolts • Nuts • Washers • Socket Screws
- Slotted and Phillips Screws • Aluminum and Stainless Steel • Alloys—High & Low Combination Steel, Brass and Bronze • Specials made to your specifications.

Telephone JA 3-3025

INTERLOCK SCREW & BOLT CORP.

106 FOSTER AVE. • P. O. BOX 11115 • CHARLOTTE 9, N. C.

KENTEX TEXTILE APRONS

• Custom-built aprons of bark or chrome tanned leather, for all types of long draft spinning and card room machinery.

S46B
44½-124

Precision made
by skilled craftsmen
with over 25
years' experience.
Write for free samples.

TEXTILE APRON CO., East Point, Ga.

HUGH WILLIAMS & COMPANY, TORONTO, CANADA—CANADIAN REPRESENTATIVE

INDUSTRIAL ENGINEERS

- MODERNIZATION PROGRAMS
- PLANT LAYOUTS
- COST SYSTEMS
- COST REDUCTION REPORTS
- WORK LOAD STUDIES
- MANAGEMENT PROBLEMS
- SPECIAL REPORTS

RALPH E. LOPER CO.

Greenville, S. C., Dial CEdar 2-3868 • Fall River, Mass., Dial OSborne 6-8261
Specializing in Textiles Since 1914

the ballroom of the Carolina Hotel Thursday night, and prizes were awarded Friday night following the banquet.

Committees for the 1960 Outing were: *Invitation*—Frank P. Barrie, *Chairman*; *Golf*—D. Cunningham, *Chairman*, Jim Schenck, Bryce Holt; *Refreshments*—Austin Elliott Jr., *Chairman*, Dan Holsenbeck, Norfleet Gibbs, Wayne Lackey; *Skeet*—John Seymour, *Chairman*, Harry Wade, Gene Cross Jr.; *Entertainment*—Allen Mebane, *Chairman*, Harry James; *Prizes*—Muir Lyon, *Chairman*, Louis Cramer, Herman Waters.

Officers of the association include James Anthony, president; Thomas Ethridge, vice-president; Ben Jordan Jr., secretary; Wilbur Evans, treasurer; Frank P. Barrie, executive secretary.

The following firms are members of the Carolina Yarn Association: Aberfoyle Mfg. Co., American & Efird Mills, American Enka Corp., American Thread Co., American Viscose Corp., Anthony, Cheatham & James, Barnhardt Brothers Co., Beaunit Mills, Belmont Throwing Co., Cannon Mills, Celanese Corp. of America, The Chemstrand Corp., Collins Yarn Co., Comer-Avondale Mills, Cosby & Thomas Co., Courtaulds (Alabama) Inc., William H. Crenshaw, Cross Cotton Mills, Dixie Mercerizing Co., The Duplan Corp., The Du Pont Co., Eastman Chemical Products, The Elmore Corp., The B. F. Goodrich Co., Grove Silk Co., Harden Mfg. Co., Harriet-Henderson Cotton Mills, Hartford Rayon Co., Hemmerich Corp., Hickory Dyeing & Winding Co., Hickory Throwing Co., Industrial Rayon Corp., Johnston Mills Co., Kahn & Feldman Inc., Leon-Ferenbach Inc., Madison Throwing Co., Harold Mahon, Nettleton P. Murphy, National Aniline Division of Allied Chemical & Dye Corp., Pharr Yarns Inc., Pickett Cotton Mills, Sellers Mfg. Co., Southern Franklin Process Co., Southern Mercerizing Co., Standard-Coosa-Thatcher Co., John L. Stickley, Tex-Elastic Corp., Textiles Inc., Waterman, Merrill & Largen Co., and Charles E. Wood.

Associate member firms include: Branson Sales Co., Burlington Throwing & Yarn Sales Co., Sam M. Butler Inc., Carlton Yarn, Crompton-Richmond Co., J. A. Davant & Co., Dow Chemical Co., John E. Fox, Highland Cotton Mills, Hubshman Factors Corp., William Iselin & Co., Kau-magraph Co., Lassiter Corp., Leesona Corp., John P. McGuire & Co., Meinhard Co., L. P. Muller Co., Paramount



David A. Long Jr. of Amazon Cotton Mills, Thomasville, N. C., accepts a silver bowl and television set as top winner in the skeet competition. Offering congratulations is W. C. Cannon of Cannon Mills, Kannapolis, N. C.

Textile Machinery Co., John J. Ryan & Sons, Scott & Williams, Simpson Printing Co., Sonoco Products Co., J. P. Stevens Yarn Sales, Textile Banking Co., Textile Machine Works, The Torrington Co., Trust Co. of Georgia, Wachovia Bank & Trust Co., and Wildman Jacquard Co.



Two representatives of the N.A.H.M. took home some of the golf loot—Matt Kurtz, a coffee-maker; Russ Katzenmoyer, a ladies' wrist watch.



Bryce Holt of Industrial Rayon Corp., Greensboro, N. C., took low net golfing honors at the C.Y.A. outing. Presenting him with his trophy is James Anthony, C.Y.A. president.



Carting away a prize just for being there is Robert L. Peacock of American Enka's Greensboro, N. C., office. The prize: a new set of Spaulding irons.

STAR • STARSO

2 SILICATES OF EXCEPTIONAL PURITY*

For continuous or batch bleaching with hydrogen or sodium peroxide, or hypochlorite-peroxide.

- Purified to prevent precipitation.
- Purified to prevent wasteful decomposition of bleach.
- Prepared for individual mill needs (Starso's higher alkalinity lowers consumption of NaOH.)

	Weight Ratio %Na ₂ O : %SiO ₂	%Na ₂ O	%SiO ₂	°Be. at 68°F.
STAR	1:2.50	10.6	26.5	42.0
STARSO	1:1.80	13.4	24.1	44.6

*Processed to minimize impurities such as iron and titanium to avoid catalytic decomposition of peroxide.

Purified silicates for textile bleaching

PHILADELPHIA QUARTZ COMPANY
1170 Public Ledger Building, Philadelphia 6, Pa.

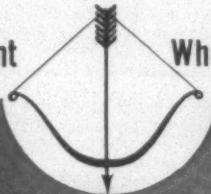


PQ SOLUBLE SILICATES

9 PLANTS • DISTRIBUTORS IN OVER 65 CITIES

Trademarks Reg. U.S. Pat. Off.

"What You Want" "When You Want It"



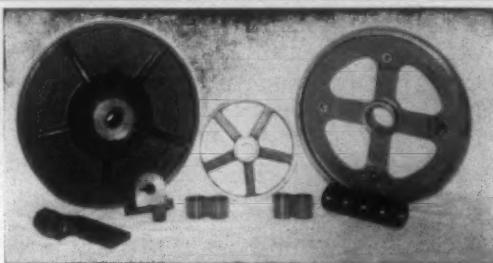
WONALANCET

INDIA COTTON

Assam *Scind*
Tipperah *Punjab*
Comilla *Bengal*

WONALANCET COMPANY

3240 Peachtree Road, N. E., Atlanta, Ga.
 Mill and Main Office:
 128 Burke St., Nashua, New Hampshire



MOORESVILLE IRON WORKS, Inc.

P. O. Drawer 390



Phone NO 3-4711

MOORESVILLE, N. C.

TEXTILE MACHINERY AND PARTS

Semi-steel Grey Iron, Bronze, and Aluminum Castings. Quality loom beams our specialty. Metal and wood loom beams with stationary or adjustable heads. Immediate delivery on precision motor pinions from our stock. Also fast delivery on Draper and Crompton and Knowles loom parts from our ever increasing stock. Special parts and machines quoted on upon request.

Custom Made
RUBBER PARTS

WET PROCESSING AGENTS
BURK-SCHIER
FOR EVERY TEXTILE APPLICATION

BURKART-SCHIER CHEMICAL CO.
CHATTANOOGA, TENNESSEE
MANUFACTURING CHEMISTS FOR THE TEXTILE INDUSTRY

Cotton Consumption Down In April

Cotton consumption in the U. S. in April totalled 708,000 running bales as compared with 888,000 bales in March and 718,000 bales in April 1959, according to the Census Bureau. Cotton stocks in April totalled 10.6 million bales as compared with 11.7 million bales in March and 11 million bales in April of last year.

Some 7,600 bales of foreign cotton were consumed in April as compared with 9,400 bales in March and 7,800 bales in the previous April.

Man-made fiber staple consumed in April totalled 36.3 million pounds. This compares with 44 million pounds in March and 40.8 million pounds in April 1959.

Some 19.9 million spindles were in place in April with 19.3 million active. This is approximately the same as March and compares with the 20.4 million spindles in place and 19.3 million active in April of last year.

First Quarter Tire Cord Production Up Over Previous Quarter's Production

Production of tire cord and tire fabric during the first quarter of 1960 was 116.6 million pounds, 5% above the previous quarter and 5% below the first quarter 1959 level, according to figures given by the Bureau of the Census.

The output of rayon tire cord and tire cord fabric increased to 3% from the previous quarter's level to 68.7 million pounds. During the same period the production of nylon tire cord and tire cord fabric increased 8% to 36 million pounds.

Stocks of tire cord and tire cord fabric on April 2 were 49.2 million pounds, 6% below the January 2 level but 36% above the level on April 4, 1959.

Wool And Worsted System Consumption Increases 6% In April Over March

The weekly average rate of fiber consumption on the woolen and worsted systems in April was 6% above the March rate and 7% below the April 1959 level. The weekly average raw wool consumption in the month was 8.4 million pounds (scoured basis) or 7% above the March level and 9% below the April 1959 rate. Consumption of apparel class wool was 8% above the March rate and 13% below that of April of last year.

The rate of consumption of carpet class wool increased 5% from the preceding month, and was 2% below the rate for April 1959.

Consumption of fibers other than raw wool averaged 6.9 million pounds per week or 4% above the March average and 5% below the consumption for April of last year.

Textile Imports Up In April

Imports of most textile manufactures into the U. S. in April showed increases over April of 1959. April imports of cotton cloth at 45.8 million square yards valued at \$7.6 million compared with 12.3 million square yards valued at \$3.2 million in April of last year. March imports totalled 39.9 million square yards and were valued at \$7 million.

Cotton yarn imports in April at 1.7 million pounds were up 1.6 million pounds from April of 1959 but were down 46,000 pounds from March.

Imports of other cotton manufactures in April amounted

to \$15.7 million, contrasted with \$11.9 million a year ago and \$16.3 million in March.

U. S. imports of wool manufactures in April were valued at \$14.2 million as compared with \$13.5 million in April of last year and \$19 million in March.

Burlap imports totalled \$6.5 million in April against \$9.1 million in April 1959. Imports of silk manufactures totalled \$5.4 million as compared with \$4.7 million last year. Imports of flax, hemp and ramie manufactures in April were valued at \$2.8 million against \$2.2 million in April 1959.

Man-Made Textile Fiber Production Reaches New Record Level In 1959

World production of man-made textile fibers in 1959 reached the record level of 7 billion pounds, 16% above 1958 and also 8% above the previous high of 6.5 billion pounds produced in 1957, according to the *Textile Organon*, statistical bulletin of the Textile Economics Bureau Inc., New York City.

The 1959 total was made up of 5.6 billion pounds of rayon+acetate, an increase of 11% over 1958, 1.3 billion pounds of non-cellulosic fibers, up 38% and 182 million pounds of textile glass fiber, up 43%.

The current world man-made fiber producing capacity is reported by the *Organon* at 9.5 billion pounds for all man-made fibers. By 1961, the capacity is expected to increase to 10 billion pounds or 50% over the current level of production. World rayon+acetate capacity is currently 7.4 billion pounds and is expected to increase by 5% to 7.8 billion pounds by the end of 1961. For the non-cellulosic man-made fibers, the current capacity is placed at 1.8 billion pounds and is projected to 2.4 billion pounds, an increase of 30%, by December 1961.

The U. S. continued as the world's leading producer of cellulosic fibers with a 1959 production total of 1.2 billion pounds last year. Japan was the second largest producer with 848 million pounds, West Germany held third place with 527 million pounds and the United Kingdom was fourth with 429 million pounds. Next in order were the U.S.S.R. with 364 million pounds, Italy with 342 million pounds, East Germany with 305 million pounds and France with 242 million pounds.

Taking the data on the production of rayon+acetate staple+tow alone, however, Japan was the world's leading producer with a total of 592 million pounds as against the U. S.'s 430 million pounds. West Germany was the third largest producer with 366 million pounds, the United

COMPLETE BEAM SERVICE

Cast iron loom beam heads with cut tooth or sand tooth gears, and adjustable steel beams. Any size and type.

Repairs and Repair Parts on any make and size warper section beams.

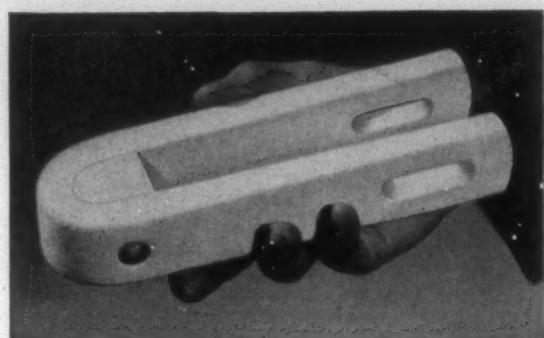
Reasonable prices.

Cronland Warp Roll Co., Inc.

LINCOLNTON, N. C.

Tel. RE 5-6564

HARRIS HEAVY DUTY LUG STRAPS AND HOLD UPS



All Canvas Lug Straps and Lug Strap Hold Ups are made of the best quality materials we can buy, put together with the best workmanship. Lug Straps are available with or without plugs in 1" increments from 8 to 18 inch lengths and in 1 1/2 and 2 inch widths. Partial or full leather lining available to suit requirements. Lug Strap Hold Ups available in all standard sizes in either canvas, leather or hairon leather.

RICE DOBBY CHAIN COMPANY MILLBURY, MASSACHUSETTS

Southern Representatives

Holt Associates, Inc.

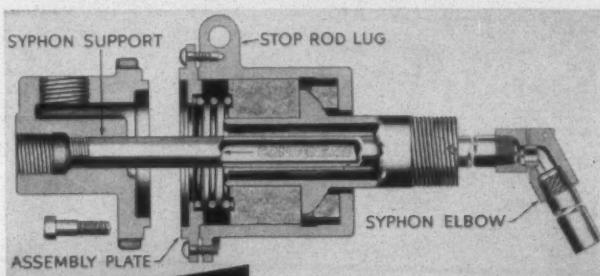
P. O. Drawer 1319

1910 Wendover Avenue

Greensboro, N. C.

TRY THIS on your Dry Cans and 30" Slasher Cylinders

We'll gladly furnish a pair of these units for 90-day obligation-free trial in your mill. The Type SB2P is self-supporting, completely packless, needs no lubrication or adjustment. The Johnson Syphon Elbow permits the use of two straight pipes instead of an unwieldy curved syphon pipe, is hinged to pass right through the joint.



Write for Catalog S-3002

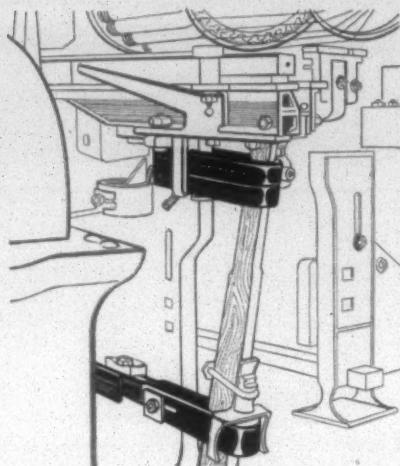
Shows self-supporting Johnson Joints for all needs . . . on print cans, calenders, compressive shrinkage ranges, big 5' and 7' cotton slasher, dry cans, etc.



THE JOHNSON CORPORATION

810 Wood St., Three Rivers, Mich.

**New
Economy
for the
Weave
Room**



Rhoads new Twin-Check Straps give better checking and boxing. You get a smooth check with wear distributed evenly. Service life is increased. Rhoads Twin-Checks are pre-stretched — they require little or no adjustment. Made of Rhoads finest Tannate Leather in perfectly matched endless lengths. For quotations or literature, write J. E. RHOADS & SONS, 2100 West 11th St., Wilmington 99, Delaware.

RHOADS
Since 1702 . . . Pioneers in Textile Leather

**ONE COILER
EXCELS!**

McDONOUGH

There are more McDonough large coilers in use than any other make. Try one in your mill without obligation and learn why.

McDONOUGH POWER EQUIPMENT, INC.
McDonough, Georgia, U.S.A.

TELEPHONE UN 5-0371

WORKS N. MARIETTA ST.

**BARKLEY
MACHINE WORKS**
MANUFACTURERS OF
**TEXTILE MACHINERY
PARTS**

GASTONIA,

NORTH CAROLINA

Kingdom was fourth with 250 million pounds and East Germany held fifth place with 247 million pounds. Other nations whose output of cellulosic staple+tow exceeded 100 million pounds in 1959 were Italy with 179 million pounds; the U.S.S.R. with 160 million pounds; France, 125 million pounds; and Austria, 112 million pounds.

Turning to the production of non-cellulosic man-made fibers, the U. S. was by far the largest producer with a total of 645 million pounds in 1959. Japan held second place with 177 million pounds; the United Kingdom produced an estimated 85 million pounds; West Germany, 85 million pounds; France, 72 million pounds; and the U.S.S.R., 30 million pounds. Significant increases in non-cellulosic fiber producing capacity are planned in France, West Germany, Japan and the United Kingdom in addition to the U. S.

Textile glass fiber production is concentrated in the U. S. with a 1959 output of 147 million pounds out of the known world total of 181 million pounds. The other six countries which supplied data were France 14 million pounds, Japan 13 million pounds, Italy 3 million pounds, Canada 2 million pounds, Sweden 1 million pounds, and Mexico 400,000 pounds.

The *Organon* compilation of U. S. man-made fiber imports for consumption in the first four months of 1960 shows that rayon+acetate staple entries amounted to 27.5 million pounds, including 4.4 million pounds of carpet staple. In 1959, the January-April imports amounted to 39.4 million pounds which included 7.9 million pounds of carpet staple. Additionally, non-cellulosic man-made staple imports in the first four months of the year came to 674,000 pounds versus 1.5 million pounds to the same point in 1959.

Man-made filament yarn imports through April totalled 1.7 million pounds comprising 983,000 pounds of rayon+acetate yarn and 677,000 pounds of non-cellulosic yarns. A year ago the figures were 1.1 million pounds total, 109,000 pounds of rayon+acetate yarn and 1 million pounds of non-cellulosic yarn. The significant increase of rayon+acetate yarn this year represents shipments coming mainly from Japan.

**N. C. Vocational Textile School
Advertises For Bids For Addition**

The North Carolina Vocational Textile School, Belmont, has advertised for bids on the construction of a new two-story addition, 31 by 61 feet. When the addition is completed it will release space in the present building for training in testing cotton fibers. The testing will be added as part of the yarn manufacturing course conducted by the school. The addition will also provide space for training in the cutting and sewing of knitwear.

**20th Century Clothing Trends
Outlined By Wool Bureau Economist**

The outstanding feature of the clothing economy in America in the 20th century has been the elimination of dress differences among various social and economic groups, according to Ruth Jackendoff, economist for the Wool Bureau. This and other significant trends which have changed the character of the clothing market were discussed recently by Miss Jackendoff before the Fashion Institute of Technology's "Workshop in Fashion Merchandising."

Miss Jackendoff pointed out the tremendous expansion of the so-called "separates" represented by skirts, blouses, slacks, sweaters and sport jackets, while the market for traditional tailored clothing has remained stable or declined.

This represents a switch from "big ticket" items to "little ticket" items and made it possible for the average consumer to increase the number of items in his wardrobe without any significant increase in per capita clothing expenditures. The continuation of this trend will only increase selling costs at the expense of profit margins, she said.

Miss Jackendoff told the group that over the next decade the dominant features of the consumer economy which have tended to depress clothing expenditures will become less important. The most positive, dynamic factor favoring an accelerated rate of growth in clothing expenditures will be the swelling of the college and career markets as the baby crops of the forties and fifties move into the older age groups.

In addition to economic changes which are expected to stimulate clothing expenditures, Miss Jackendoff said, clothing may be taking on new significance as the "status symbol" of the sixties displacing the ones which acquired this label in the fifties.

Crenshaw Named Chairman Of N. C. Cotton Buyers Group

Tom Crenshaw, cotton buyer for Spindale (N. C.) Mills, has been elected chairman of the Cotton Buyers and Classers Division of the North Carolina Textile Manufacturers Association. Crenshaw succeeds H. M. Weymouth of American & Efird Mills, Mt. Holly. F. M. Arthur, Textiles Inc., Gastonia, was elected vice-chairman of the group. T. A. Moore of Sterling Spinning Co., Franklinton, was named to the executive committee.

Cotton History Review Launched

The Cotton History Group has launched a quarterly review called *The Cotton History Review*. The group hopes to help preserve the record of the U. S. cotton industry's contributions to the national heritage. Richard W. Griffin, executive secretary of the history group, is editor of the new publication. The Cotton History Group was formed in 1947 as a joint effort on the part of a group of textile leaders and business historians who felt that there was a long overdue need to devote more attention to the past of the U. S. cotton textile industry. Further information about the quarterly can be obtained from Richard W. Griffin, History Department, Auburn University, Auburn, Ala.

A.C.M.I. Public Relations Head Warns Of Foreign Competition Danger

The growing flood of imports from low-wage nations constitute the most serious economic, government relations and public relations problems currently facing many of the nation's basic industries, John F. Campbell, newly appointed director of public relations for the American Cotton Manufacturers Institute, told members of the Greenwood, S. C., Kiwanis Club recently.

"The kindly American hand extended to help build up industrial productivity in under-developed nations has been turned to slap our own domestic producers by allowing low-wage imports free access to American markets," he stated.

NOW BETTER WATER REMOVAL ... AT LOWER COST



MANHATTAN TEXTRACTOR and TEXROC ROLLS

- MAXIMUM EDGE-TO-EDGE UNIFORM WATER REMOVAL • LONGER ROLL LIFE • LOWER ROLL COSTS • "MORE USE PER DOLLAR"

ASK A MANHATTAN ROLL ENGINEER ABOUT MANHATTAN TEXTRACTOR AND TEXROC ROLLS. ALSO ASK ABOUT THE NEW MANHATTAN SLASHER ROLL—for faster, lower cost slashing, improved sizing.

RM1051-R1

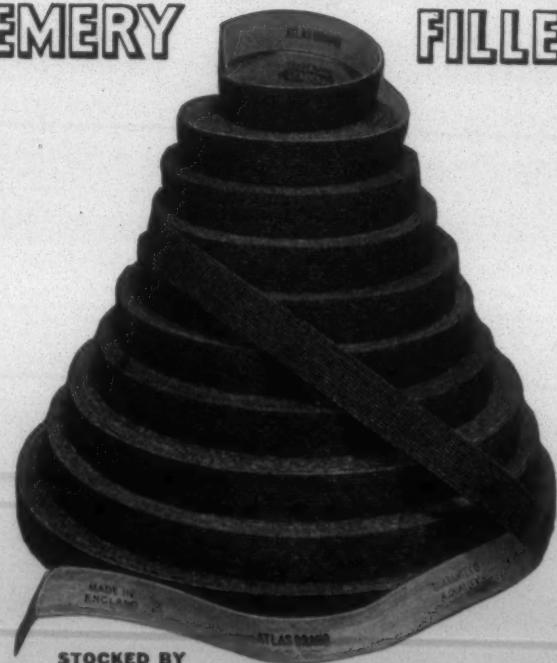
RUBBER LINED TANKS, PIPE AND FITTINGS
RUBBER AND ASBESTOS PRODUCTS

RAYBESTOS-MANHATTAN, INC.

MANHATTAN RUBBER DIVISION, PASSAIC, NEW JERSEY

Textile Roll Covering Plants at
N. CHARLESTON, S. C. PASSAIC, N. J.

DRONSFIELDS' PATENT ATLAS BRAND EMERY FILLET



STOCKED BY
**THE PRINCIPAL MILL SUPPLY HOUSES
AND CARD MAKERS**

ALLEN BEAM COMPANY
NEW BEDFORD, MASS.
Beams for all makes of
High Speed Warpers
LOOM BEAMS
Adjustable Loom Beam Heads
"Good Warps are made on Good Beams"

ANTI-FRICTION
HIGH SPEED
MEADOWS
TWISTERS
MEADOWS MANUFACTURING CO.
Established 1931
ATLANTA, GA. U. S. A.

Campbell cited the textile industry as bearing the brunt of the competitive onslaught of low-cost imports from foreign countries.

"No American industry has a better price-quality record than does the textile industry," he stated. "Yet the competition from imported textiles is based upon a wage-price combination that cannot be met without sacrifice to the standard of living and job security of American workers."

"Imports pose the textile industry's most serious economic problem," he continued, "because they seriously impair the progress of the tremendous economic resurgence of textiles, so important to the growing economy of the South and of the nation. Imports complicate the task of planning for the technological innovations and product research so necessary to keep pace with the dynamic changes in consumer needs and desires."

Campbell pointed out the cause-and-effect relationship between public opinion and government action and called for a concerted effort by the textile industry and by other industries affected by imports to arouse public opinion in favor of a realistic reappraisal of American foreign trade policy.

"Textile men are fully aware of the role of foreign trade in America's foreign policy," he said. "They welcome competition from abroad provided both parties to the game are playing by the same rules. But," he concluded, "American jobs and job security are too dear a price for us to pay for the economic development of other countries."

A. B. Carter Scholarship Awarded

Theodore Brownson Frazer II, is the 1960-61 winner of the \$500 scholarship granted by A. B. Carter Inc. of Gastonia, N. C., in the School of Textiles at North Carolina State College.

A.A.T.T. Forms Technical Council

In accordance with its new constitution, the American Association for Textile Technology has appointed its first Technical Council. Members of the newly-formed council are: Stanley Backer, professor of mechanical engineering, M.I.T.; Erb N. Ditton, textile consultant, New York City; Ephraim Freedman, director of Macy's Bureau of Standards, New York City; Walter J. Hamburger, director and treasurer of Fabric Research Laboratories, Dedham, Mass.; Stephen J. Kennedy, research director, Quartermaster Corps., U. S. Army, Natick, Mass.; Richard T. Kropf, vice-president, Belding Hemingway Co., New York City; Gerard K. Lake, vice-president, Burlington Industrial Fabrics Co., New York City; William A. Newell, director of textile research center, North Carolina State College, Raleigh; Edgar L. Schlesinger, vice-president, United International Corp., New York City; Arthur M. Spiro, vice-president, Waumbec Mills, New York City; Paul B. Stam, director of research, J. P. Stevens & Co., Greensboro, N. C.; Michael H. Strub Jr., manager of the technical department of The Duplan Corp., Winston-Salem, N. C.; and Philip Wick, president of Philip Wick Co., New York City.

The duties of the council will include the investigation of proposals for technical activities in A.A.T.T., recommendations to the board for suitable action on such proposals, the interpretation for membership of technical developments of national importance, and such other technical activities within the interests of the association.

Promotions, Resignations, Honors,
Transfers, Appointments, Elections,
Civic and Associational Activities

PERSONAL NEWS

Four promotions have been announced by Clinton Corn Processing Co., Clinton, Iowa. R. C. Rau has been named sales manager of primary products, with headquarters at Clinton. He was formerly Southern division general sales manager headquartered at At-



Rau



Cline



Kair



Estes

lanta, Ga. . . . C. F. Cline Jr. has been named to succeed Rau as Southern division general sales manager and Southern headquarters have been transferred to Greenville, S. C. . . . Russell L. Kair has been appointed district manager of the Atlanta district covering the states of Georgia, Florida, Alabama, Mississippi, Louisiana, Texas and Tennessee with headquarters at Atlanta. . . . Boyce L. Estes also has been appointed district manager of textile sales, covering the states of Georgia, Alabama, Mississippi and Tennessee with headquarters at Atlanta.

M. Weldon Rogers, formerly vice-chairman of Exposition Cotton Mills, Atlanta, Ga., has opened an office as a textile consultant. Rogers also served at one time as vice-president of Burlington Industries and president of Ely Walker Dry Goods Co.

Chicopee Mills Inc., New York City, has elected two new vice-presidents, Stephen Dunton and J. Frank Pratte. Dunton will continue in his capacity as manager of the greige goods division and Pratte will continue as sales manager of the general line division. Dunton joined Chicopee Mfg. Corp., an allied company, in 1940 as an accountant. Later he became assistant manager of marketing for Chicopee Mills, and still later transferred to the greige goods department, where he was assistant to the

vice-president. He is a member of the executive committee, Textile Section, New York Board of Trade Inc. Pratte joined Chicopee in 1945 as a sales representative. He was made assistant sales manager of general line in 1952 and sales manager of nonwoven fabrics in 1956. Two years later he was made sales manager of general line.

Leslie L. Walmsley and Irving H. Welch have been promoted in the technical service department of American Viscose Corp., Philadelphia, Pa. Walmsley, previously head of the dyeing and finishing division, has been promoted to the newly created position of converting relations technical advisor. In this position he will act as a technical advisor and industry consultant particularly on the several new rayon fibers which American Viscose is introducing. Welch has been promoted to head of the dyeing and finishing division of the technical service department, replacing Walmsley.

James C. Self, president of Greenwood (S. C.) Mills, has been named a life member of the Clemson College board of trustees.

Eugene R. Perry, president of the National Vulcanized Fibre Co., Wilmington, Del., was recently awarded the first annual management award by the Wilmington chapter of the Society for the Advancement of Management. Perry was honored for his "significant contributions" toward the advancement of management, and for "outstanding contributions in professional, civic and community affairs."

Walter M. Gaston, formerly production manager of the rayon filament plant of American Enka Corp., Lowland, Tenn., has been named manager of the plant. Gaston joined Enka in 1931. He became production manager of the filament plant in 1957. . . .

H. G. Heedy has been named plant manager of the rayon staple plant in Lowland. Heedy was formerly production manager at the staple plant. He has been with the company since 1946 and production manager since last year. The promotions were occasioned by the retirement of Jan Heykoop, plant manager, who was in charge of both the filament and staple plants. Heykoop joined the company in 1928.



Manning

ten years he was associated with the accounting firm of Haskins & Sells.

Frank Clark, special assistant overseer in the weaving department of the White Oak Plant of Cone Mills Corp., Greensboro, N. C., has been transferred to the position of overseer of weaving at the company's Proximity Plant.

Charles P. Castelli, controller, Berkshire Hathaway Inc., New Bedford, Mass., and John E. Lee Jr., controller, Callaway Mills Co., LaGrange, Ga., have been elected to membership in the Controllers Institute of America. Established in 1931, the institute is a non-profit management organization of controllers and finance officers from all lines of business.

B. F. Byrd has been named general overseer of weaving of Fulton Cotton Mills, Atlanta, Ga. Byrd was formerly associated

"A Dependable Source of Supply"

McLeod
LEATHER & BELTING COMPANY
GREENSBORO, NORTH CAROLINA
Serving the Mills Over 40 Years

BROOKSBANK
Check Straps

MACOAK & GREYHOUND
Belting

STRONG AS AN OX

PERSONAL NEWS

with the Eagle & Phenix Division of Reeves Bros., Columbus, Ga., where he was weave room overseer and night superintendent. . . . Adrain C. Smith has joined the company as foreman in the spinning department. He was formerly overseer of carding and spinning with Piedmont Cotton Mills, East Point, Ga.



Stephens

Browder, former executive vice-president of Dan River Mills, on the Woodside board. Stephens joined Dan River in 1946, after previously holding several administrative and managerial positions with Bibb Mfg. Co., Macon, Ga.

J. Haines Spencer has been named vice-president and general manager of the new USF-Arnold Finishing Division of Indian Head Mills Inc., New York City. Spencer succeeds William J. Durocher, who has retired. Durocher will remain with the division on a consultant basis. Spencer was a vice-president of the firm before its purchase by Indian Head.



Sookne

Arnold M. Sookne, associate director of Harris Research Laboratories, Washington, D. C., has been named as the 1960 recipient of the Olney Medal by the American Association of Textile Chemists & Colorists. The Olney Medal is presented each year to a member of the A.A.T.C.C. for outstanding achievement in the field of textile chemistry. Sookne's contributions include work on the relationship between molecular weight and various mechanical properties of cellulose acetate, development of methods of fiber evaluation based on single fiber properties, development of chemical processes for improved water-re-

pellent fabrics, shrink-resistant wool, wash-and-wear cottons and basic chemical studies which helped clarify the electrophoretic properties of fibers.

Clowes M. Christie, president of the Dayco Corp., formerly Dayton Rubber Co., Dayton, Ohio, received the honorary degree of Doctor of Laws from Drury College, Springfield, Mo., recently. Since 1948, one or two citizens have been selected by the college each year from the nation at large and awarded appropriate honorary degrees. Christie was honored for "his contributions to the American way of life." He will be the only industrialist receiving the honor this year, the college said.



Farmer

Paul H. Farmer has been appointed sales manager for Foster Machine Co., succeeding Edward C. Connor, who was recently elected president of the company. Farmer joined Foster in 1950 and was appointed assistant sales manager in 1956. He attended

Lafayette College and New Bedford Textile School.

William J. Moore of Greenville, S. C., was recently appointed as a special representative to the Southern textile mills for the textile division of The Creamery Package Mfg. Co., Chicago, Ill. Moore will represent the company for positive stainless steel slasher pumps—rotary type, stainless steel heat exchangers for starch cooling, homogenizers for sizing, and the company's complete range of refrigeration equipment including compressors and boosters.

Ernest D. Smith of Concord, N. C., has been elected vice-president and general manager of the Southern division of Organic Chemical Corp., East Providence, R. I. Organic recently opened its new sales office and warehouse in Concord, having moved its quarters recently from Charlotte.

Allen R. Merrill has been appointed plant manager of the Celanese Fibers Co.'s spun yarn plant in Burlington, N. C. He succeeds George Aspin Jr., who has been promoted to fibers planning manager of the company at its Charlotte headquarters. Merrill joined Celanese at its Summit, N. J., laboratories in 1951 as a textile engineer. He was later

transferred to Charlotte, N. C., as supervisor of the general spinning section of the application and product development laboratories and at the time of his appointment as plant manager was technical superintendent at the Burlington plant.



Caughman

John M. Caughman Sr., superintendent of Spartan Mills of Spartanburg, S. C., was recently awarded the honorary degree of Doctor of Commercial Science at the commencement exercises of Newberry College at Newberry, S. C. He has served as a member of the college's board of trustees, and as chairman of the board's finance committee, for several years. Before becoming superintendent of Spartan Mills in 1941, he was associated with the Goodyear Mills of Cedartown, Ga., the Springs Mills of Lancaster, S. C., and Startex (S. C.) Mills. He is a past president of the Southern Textile Association.

Richard H. Johnson Jr., Johnson Bros., has been appointed exclusive sales and service representative in the Knoxville, Tenn., territory by Lewis-Shepard Products Inc., Watertown, Mass., producer of electric fork lift trucks and related materials handling equipment.



Boney

Paisley Boney, purchasing agent for J. P. Stevens & Co., Greensboro, N. C., was recently elected president of the National Association for Purchasing Agents. Boney has been associated with the purchasing department of Stevens for 16 years and has

been active in the Carolinas-Virginia Purchasing Agents Association. He is a past vice-president and financial officer of the national association.

Ray L. Swetenburg, vice-president of Chicopee Mfg. Corp., Gainesville, Ga., is the new chairman of the board of directors of the Georgia-Alabama Textile Traffic Association. He succeeds W. Alex Turner, Avondale Mills, Sylacauga, Ala. The traffic board is made up of an equal number of members from Georgia and Alabama, with the chairmanship alternating between the states annually. The association serves some 85 textile companies in the two states.

J. Clyde Simmons has been named plant manager of the Gerrish Milliken Mill at Pendleton, S. C. Simmons was formerly plant manager of the Kingsley Mill Corp., Thomson, Ga. He replaces Henry J. Dekker, who has accepted a sales position with Deering Milliken & Co., New York City.

I. Rogosin, president of Beaunit Mills, New York City, has been named chairman of the board of Tyrex Inc., non-profit association of Tyrex tire cord producers. He succeeds Gerald S. Tompkins, president of American Viscose Corp. Rogosin is one of the founders of Tyrex Inc. . . . Hayden B.

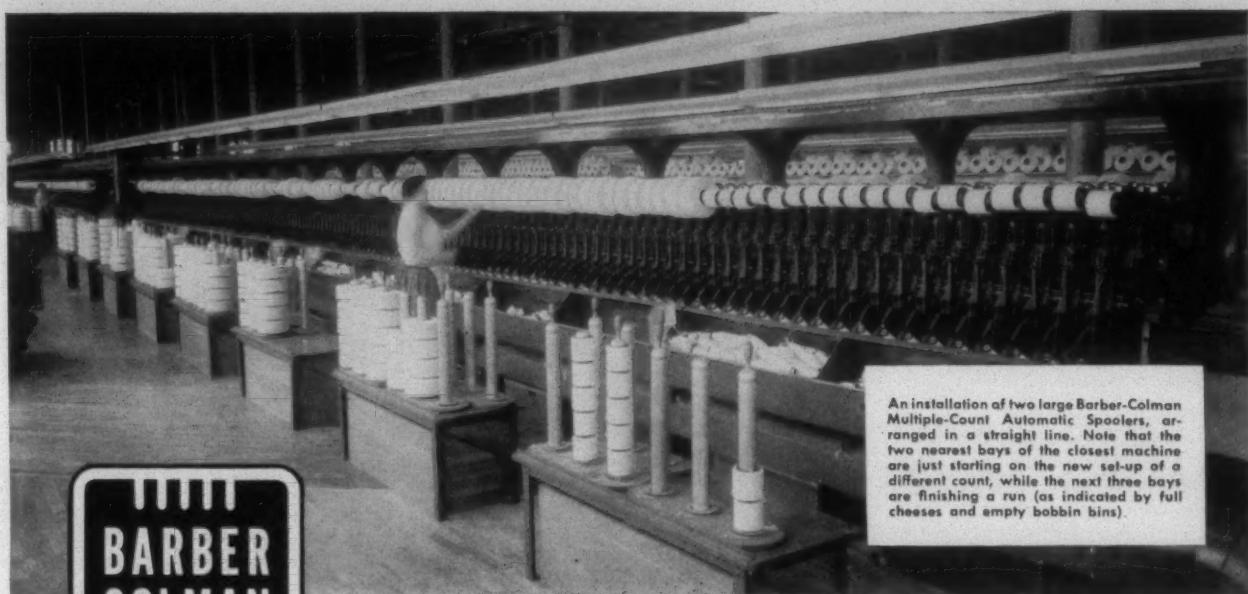
Management profits from group plans tailored by the Pilot

Your operation will show a greater net profit from improved employee relations, increased competence of attracted personnel and reduced labor turnover. Write or wire

Pilot Life Insurance Company

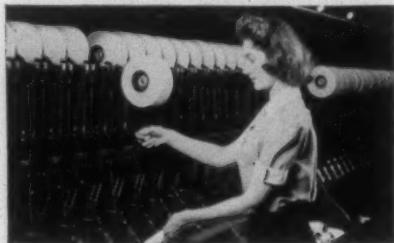
GROUP DIVISION • GREENSBORO, NORTH CAROLINA
PILOT TO PROTECTION FOR OVER FIFTY-FIVE YEARS • O. F. STAFFORD, PRESIDENT





An installation of two large Barber-Colman Multiple-Count Automatic Spoolers, arranged in a straight line. Note that the two nearest bays of the closest machine are just starting on the new set-up of a different count, while the next three bays are finishing a run (as indicated by full cheeses and empty bobbin bins).

Multiple-Count Automatic Spooler

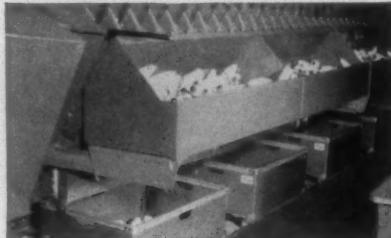


Spooler tender loading a full bobbin into the Spooler. The bobbin is dropped into a "pocket," and the yarn end is slipped into a spring clamp which positions it properly for the knitter to pick up.

Sale yarn mills and producers of piece goods that use various counts or different mixtures will find that this machine can be a very profitable investment. It is still the famous and the very familiar Barber-Colman Automatic Spooler, but with this difference: now you can wind . . .

A DIFFERENT COUNT EVERY NINE UNITS

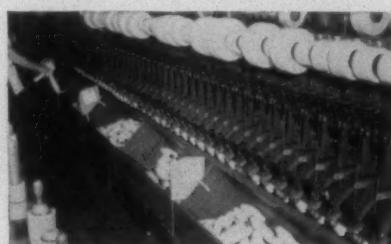
The machine is built in "bays" between uprights that support the traveler track, with nine bobbin-to-cheese winding units on each side of each bay. Empty bobbins, instead of being conveyed to a single sorting table, drop into separate boxes under each bay, thus enabling each group of nine units to be used for a different yarn count. Individual operator tables service each bay. The only limitation is that the extremes of different counts on the machine at any one time must fall within the range of the knitter in the traveler. Yarn or count changes can, of course, be readily made at any time, and any number of bays can be run on identical yarns.



A close-up of the full-bobbin supply bins which are fixed to the machine, one bin for each nine winding units. The removable empty-bobbin boxes are shown on the floor below, also arranged so there is one box for each nine units. Note box location guides.



Yarn man moving a trident of full cheeses from operator's table to a reel truck. He also returns tridents of starters, removes boxes of empty bobbins, and keeps full-bobbin bins supplied. Boxes under operator's tables are for tailings, and cheeses to be rewound.



A close-up of several full-bobbin bins showing how dividers can be used to mark off separate runs. Labels tell contents.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • WARP DRAWING MACHINES

BARBER-COLMAN COMPANY
ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A.

GREENVILLE, S. C., U. S. A.

MANCHESTER, ENGLAND

MUNICH, GERMANY

INDIA

Batliboi & Company
Forbes Street, Fort
Bombay, India

MEXICO

J. Rabasa
Isabel la Catolica 45-913
Apartado 7348
Mexico D. F., Mexico

BRAZIL

Industria e Comercio de Maquinas S. A.
"COMASA"
R. Glicério, 537/547
Sao Paulo, Brazil

JAPAN

Do-Yei Shoji Kabushiki Kaisha
Atlas Building (7th Floor)
11, Bingo-Machi, 3-Chome,
Higashi-Ku
Osaka, Japan

PAKISTAN

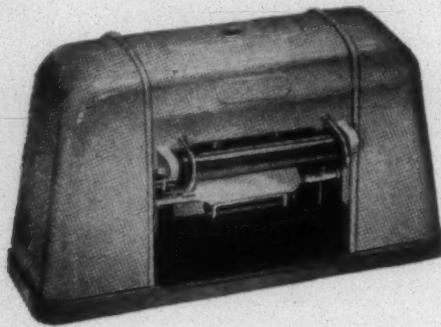
Associated Agencies
(M'cr.) Ltd.
Piccadilly House
11 Piccadilly
Manchester 1, England

PAKISTAN

Associated Agencies
(M'cr.) Ltd.
730, Muhammad House,
McLeod Road
Karachi 2, Pakistan

Visitors at the
ATLANTIC CITY
A.T.M.A. EXPOSITION
 were enthusiastic
 about the

ABINGTON **CARD ROOM** **DEVICE**



... which replaces calendar rolls and increases cotton card production up to 20% without loss of quality.

- LOW IN PRICE
- SIMPLE TO INSTALL

Write for literature

Made by Soc. Francais Cardpen
 Exclusively represented in U.S. by...

ABINGTON TEXTILE MACHINERY WORKS

Plant:

North Abington, Mass.

Southern Sales Office:

Calhoun Towers
 Greenville, South Carolina

Executive Offices:

19 Congress Street
 Boston, Massachusetts

PERSONAL NEWS

Kline, chairman of the board of Industrial Rayon Corp., Cleveland, Ohio, has been named vice-chairman of the Tyrex board. . . . Maurice Winger Jr., assistant to the president of American Enka Corp., Enka, N. C., was named treasurer.



Whalen

James F. Whalen Jr. has been promoted to Southern district manager for Becco Chemical Division of Food Machinery & Chemical Corp., Buffalo, N. Y., according to an announcement by A. P. Shutt, sales manager. His headquarters will be in Charlotte, N. C. Whalen, who has been Midwest district manager in Chicago since 1956, served as a Becco sales representative in Charlotte from 1949 until 1956. He succeeds D. Stewart Quern, who has been named sales co-ordinator for all the inorganic chemical divisions of F.M.C. in the Southern territory.

Paul Cockman, former assistant overseer of the warp spinning department of the White Oak Plant of Cone Mills Corp., Greensboro, N. C., has been promoted to the industrial engineering staff.



Lancaster

Three sales personnel changes have been announced by Sandoz Inc., New York City. Edward J. Lancaster Jr. has been appointed manager for a newly created Sandoz sales district comprising most of South Carolina, Georgia, Alabama and eastern Tennessee. Lancaster's headquarters will be in the Charlotte (N. C.) office. During the past 14 years, Lancaster has been a Sandoz sales representative for dyes and chemicals.



Spencer

Alfred W. Spencer has been moved from the post of chief chemist, chemical division, of the New York customer application laboratory, to that of supervisor of chemical sales for the Charlotte office. Spencer joined the Sandoz chemical division staff in 1954. Previously, he was superintendent of dyeing for the U. S. Finishing Co. From 1935 to 1947, he was with the Bradford Dyeing Association as a dyer. . . . Jack H. Emerson has been named a sales representative of the dyestuff and chemical divisions of the company. Emerson has been assigned to the company's Charlotte district office. He has been actively selling



Emerson

colorants in the South for the past ten years, covering the states of Alabama, Georgia, South Carolina and Tennessee for Interchemicals Corp.



Nixon

Karl B. Nixon has been appointed to the sales staff of Whitin Machine Works and will work out of the company's Atlanta regional office. Nixon was formerly agent of the Newnan (Ga.) Mills Division of Mount Vernon Mills.

A graduate of Georgia Institute of Technology, where he majored in textile engineering, Nixon has had 32 years of cotton mill experience.

J. E. Whaley Jr., formerly product manager at Kingsley Mill Corp., Thomson, Ga., has been promoted to plant manager. He was manufacturing superintendent of Gayley Mills, Marietta, Ga., prior to joining Kingsley.



Maino

Alexander J. Maino has been appointed executive vice-president of the Southern division of Massachusetts Mohair Plush Co., New York City. Maino, formerly a vice-president in the diversified company's textile division, will headquartered in Kings Mountain, N. C. Maino, who joined the firm three years ago as general manager of its Neisler Mills Division, is in charge of Massachusetts Mohair's five mills in North Carolina and one in South Carolina. The Southern division, with 1,200 employees, is a major manufacturer of pile and flat upholstery, drapery fabrics, rayon yarns and novelty yarns for furniture manufacturers and textile converters.

William H. Grier, president of the Rock Hill (S. C.) Printing & Finishing Co., has been named as Class C director of the Federal Reserve Bank of Richmond. Grier will fill the remainder of the unexpired term of D. W. Colvard, dean of agriculture, North Carolina State College, who has resigned. A director of the board of the Reserve Bank's Charlotte branch from 1954-1959, Grier is a native of Fort Mill, S. C.

Dr. Douglas W. Hill, director of the Shirley Institute for textile research at Didsbury, England, was a recent visitor to the School of Textiles of North Carolina State College. Dr. Hill conferred with the school's staff, inspected the laboratories and reviewed the work of the college's textile research center.

Robert I. Livingston has been named president and chief executive officer of Walter E. Heller & Co., commercial finance organization. Livingston joined the firm in 1937 as a lawyer on the staff of the company's general counsel.

Jacob W. Schwab, chairman and chief executive officer of the United Merchants & Manufacturers Inc., New York City, was

the guest of honor of the cotton goods and rayon industries at their annual dinner in behalf of the United Jewish Appeal. Schwab was feted for his outstanding service to the soft goods world and for the deep interest he has shown in U.J.A. and other humanitarian causes.



Cobb

Joe C. Cobb has joined the sales staff of the Terrell Machine Co., Charlotte, N. C. Cobb will be on special assignment contacting Southern mills concerning Terrell and Schlaflhorst equipment. Prior to joining Terrell, Cobb was associated with Reeves Bros.

and was previously vice-president of Pacific Mills. He is also sales manager of Benray Inc., a position he will continue to hold. Cobb will make his headquarters at Terrell's main office in Charlotte.

W. Harry McElveen Jr. has been promoted from trainee to plant engineer at the Unity Plant of Callaway Mills Co., LaGrange, Ga. Prior to joining Callaway, McElveen was associated with the Westinghouse Electric Co. in Philadelphia, Pa.



Bates

Lester W. Bates has been named plant manager for Olympic Chemical Co., Greensboro, N. C. The new firm, in which Cone Mills has a major interest, will start operations in July to produce polyurethane foam for the furniture, textile and rug

industries. For the past six years, Bates has been research supervisor for Hewitt-Robins Inc., Franklin, N. J.

A. W. Gunn has resigned as vice-president of Callaway Mills Co., LaGrange, Ga. Gunn has not announced his future plans. He entered the textile industry in 1927 following his graduation from Georgia Tech.

William E. Cruickshank has been named plant manager and Ralph Stott has been named plant superintendent by Bradford Dyeing Association, Westerly, R. I. Cruickshank has been with Bradford for 35 years and for the past three years has been the plant superintendent. Stott, now plant su-

perintendent, has been the superintendent of the bleaching division and has been with Bradford for 11 years.

George H. Hotte, director of the fiber marketing department of Allied Chemical, New York City, was the recipient, June 4, of an honorary Doctor of Textile Science degree, awarded by the New Bedford Institute of Technology, New Bedford, Mass. A graduate of the institute, Hotte also holds a Master of Science degree from the Massachusetts Institute of Technology, where he was a member of the faculty.

OBITUARIES

Joseph A. Amato, 50, vice-president in charge of the factoring division of James Talcott Inc., died recently in Las Vegas, Nev., while on a business trip. He joined Talcott in 1938 and was made a vice-president and member of the executive committee in 1950. He made his home in Manhasset, N. Y. He leaves his widow, a son and a daughter.

John Duerst, 67, for 37 years director of experimental work and research at the Newark, N. J., and Clarkdale, Ga., mills of Coats & Clark, died May 30 at his home in Clarkdale. A native of Switzerland, Mr. Duerst came to this country in 1921. Surviving are his widow and two children.

George L. Efird, 57, night superintendent for Wiscasset Mills Co., Albemarle, N. C., died recently. Mr. Efird is survived by his widow, two daughters and one son.

R. C. Heyward, 82, formerly superintendent of mills in Pelzer, S. C., and Rockingham, N. C., died May 17 in Myrtle Beach, S. C. Survivors include his widow, two sons and three daughters.

Grover B. Holtzclaw, 69, research director of Parks-Cramer Co., Fitchburg, Mass., died June 9 in a Charlotte, N. C., hospital. Mr. Holtzclaw had served as research director for the company since 1947. He is survived by his widow, two sons and four daughters.

C. J. Hyslop, 60, safety and training director of Chatham Mfg. Co., Elkin, N. C., died June 1. Mr. Hyslop had been connected with the mill for 21 years. A daughter survives.

America's Finest Lubricants
Since 1919



QUALITY LUBRICANTS



Bill Dobbins, N. C. Representative



Newt Coggins, S. C. Representative

These men know Textile mill lubrication.

They represent a firm with over 40 years of lubricating experience.

They are at your service without charge to show you how to cut your lubrication costs and downtime.

Address All Inquiries To —

**GEORGIA-CAROLINA
OIL COMPANY**
P. O. Box 101 Phone SH 2-1428
MACON, GEORGIA

KNIT DYE TUBING

For 1 5/8" Dye Tubes Our Specialty

Furnished Cut or Uncut—Ample Stocks—Prompt Delivery

Also

Davis Seamless Covered Card Thompson and Scavenger Rolls—
New or Recovered

THE TEXTILE LABORATORIES

P. O. Box 1003 • R. P. Siler, Manager • Phone UN 5-2791
GASTONIA, NORTH CAROLINA

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

GRiffin, Ga. — Thomaston Mills has announced that a 30,000-square-foot addition will be built at its plant here. The plant presently employs some 550 persons and employment will be increased by the new addition.

HENDERSON, N. C. — Two Henderson plants have received the N. C. State Labor Department's Safety Award for achievements in 1959. J. D. Mills Inc. and Harriet Cotton Mill No. 1 were cited for outstanding work in accident prevention.

YORK, S. C.—The estate of the late Col. Elliott White Springs has been valued at \$25 million. Colonel Springs died in New York, October 15. Springs operated mills at Lancaster, Chester, Fort Mill, Kershaw and Grace's Station, S. C.

CLINTON, S. C.—Lydia Cotton Mills here recently honored its 2,200 employees and members of their families at a barbecue celebrating two million manhours of safe operation. The mill received a certificate from the S. C. Labor Department for its accident-free record in 1959.

PINEVILLE, N. C.—The spinning department of the Pineville plant of Cone Mills Corp. recently completed one million manhours without a lost time accident. Jack Hughes is superintendent of the department.

BOSTON, MASS.—The board of directors of the Kendall Co. has proposed a two-for-one stock split and intends to raise the 1960 third-quarter dividend by 20%. "The stock

split should be advantageous for our stockholders by creating a better market for our shares," the board reported.

NEWBERRY, S. C.—The Kendall Co. plant here reports that it has achieved a total of one million manhours free of disabling injury. Members of the plant's safety committee were awarded a certificate of merit by the S. C. Department of Labor.

NEW YORK, N. Y.—Amerotron, textile division of Textron Inc., reports that first quarter sales and profits were better than last year. Actual figures were not given. The division said that its position is better this year and that the price situation is good.

LIBERTY, S. C.—Liberty Mill, division of Mohasco Industries, has been awarded a certificate from the South Carolina Department of Labor of its outstanding efforts in the promotion of safety in 1959.

GAFFNEY, S. C.—Work has gotten underway here on a \$155,000 three-story building for Gaffney Mfg. Co. The addition is expected to be completed by September 15.

LITCHFIELD BEACH, S. C.—Wunda Weve Carpet Co., Greenville, S. C., is currently conducting a \$1.5 million expansion program including construction of three additions to its present plant and production facilities, installation of knitting and tufting equipment and a substantial increase in key production, research and development, and sales personnel. The first of the three

additions to the weaving mill in Greenville, S. C., was recently completed. It includes some 6,000 square feet of additional space which houses a specially designed boiler and supplementary steam producing equipment necessary in custom dyeing and for handling carpet finishing processes. Two more building additions are scheduled to follow. The second construction addition will be an extension to the front of the main weave room, amounting to 40,000 square feet, and will include additional office space for accounting, sales service and production personnel. Completion is anticipated this year. The third edition will be a direct increase in manufacturing space which will expand the principal carpet weaving areas an additional 30,000 square feet. It will be initiated after the extension to the front of the mill is completed. New knitting and tufting machines, designed to Wunda Weve's specifications, are presently being installed.

ATLANTA, GA.—Stockholders of Fulton Cotton Mills have voted to change the corporate name to Fulton Industries Inc. The company said the new name would more fully describe the varied diversified industrial operations. Fulton's textile operations will continue as a separate division under the current name. Fulton's subsidiaries include Continental Gin Co., Birmingham, Ala.; Ainsworth (Ga.) Mfg. Co.; and Precision Castings Co.

HIGH POINT, N. C.—Burlington Industries has announced that it will close its plant here during the next few months and will dispose of the machinery and equipment. About 300 persons are employed at the plant in the production of worsted material. The company reported that foreign competition made it impossible to produce and sell profitably worsted goods. Two similar plants located in Carrboro, N. C., were closed for the same reason in 1958.

ROCKINGHAM, N. C.—A new mill for weaving, dyeing and finishing of pile fabrics for upholstery will go into production here in August. William J. Laine of Shelby, N. C., vice-president in charge of sales for Massachusetts Mohair Plush Co., is heading a corporation of New York businessmen who will back the new mill. It will use part of the old Safie Mills building, presently unoccupied. Laine will operate the mill.

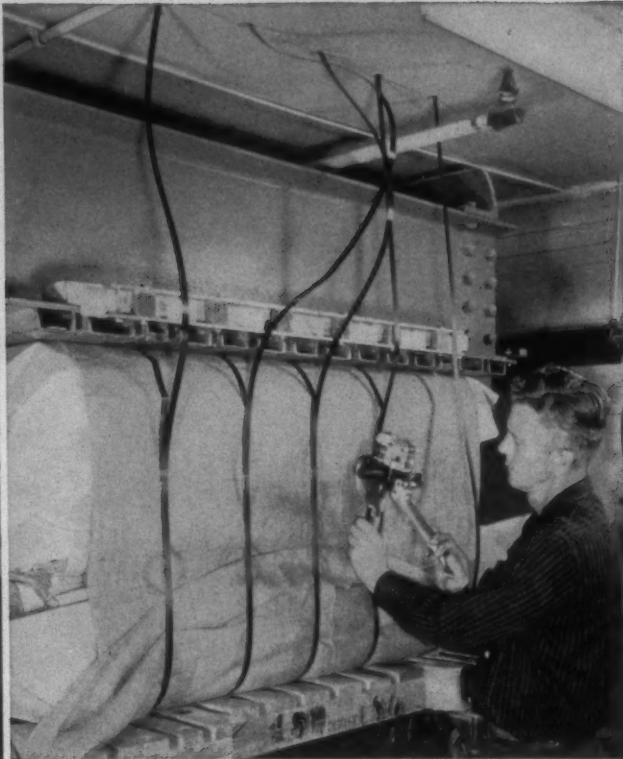
GREENVILLE, S. C.—A \$4 million expansion for Woodside Mills at Anderson and Liberty, S. C., and for Norris Cotton Mills Co., Cateechee, S. C., has been announced by R. S. Small, president of Woodside. The Haynesworth plant located in Anderson will have a production increase of 40% and will add 40 to 50 new employees. At the Liberty No. 2 plant a new building will be added, increasing spinning capacity 25% and adding 30 employees. The nature of the expansion at Norris was not disclosed.



MISS SANDRA LEE JENNINGS, 1960 Maid of Cotton, models a pair of cotton knit ensembles. Smartee uses bright brass buttons (left) to accent a red and white cardigan piped with navy that teams with a white knit shirt. A white sleeveless dress (right) is topped by boxy cardigan in an Alamac Permathal Everglaze cotton knit. From Koret of Calif.

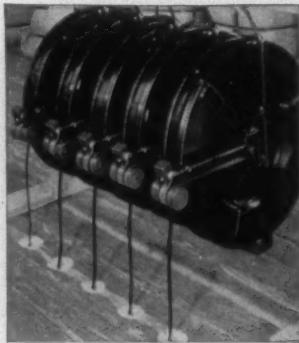


Strapping is fed from dispensers in room above press. A magnetized bar holds the straps in position while bale is readied.

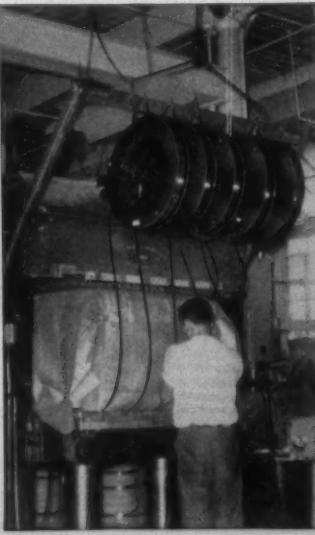


Signode's exclusive Model SFC tool tensions the strapping, feeds seals from magazine, and crimps them. Straps are severed at the seal. No waste strap.

Signode way produces denser bales and reduces strap use by 17%



Strapping dispensers can be in a variety of locations. Above, they are shown set up in an overhead storage area; at right they are shown installed on a framework over the press. They may also be installed on the floor beneath the press or behind the operator.



Exclusive Straprollers prevent overrun of strapping from dispensers.

Here's an example of a simple and inexpensive answer to a packaging problem. Waste—which was part of the former cut-to-length strapping method—was eliminated, with a 17% saving in the amount of strapping used. Bales are better looking. Their increased density saves about 7% of valuable space in storage and shipment. The entire strapping operation is simplified, goes easier and faster.

Why not let a Signode man take a new look at your packaging and shipping operation. He has an eye for savings, specialized knowledge of textile applications, and a complete line of strapping tools and machines at his disposal. Call him today, or write:



First in steel strapping

SIGNODE STEEL STRAPPING CO.

2665 N. Western Avenue, Chicago 47, Illinois

Offices Coast to Coast. Foreign Subsidiaries and Distributors World-Wide.
In Canada: Canadian Steel Strapping Co., Ltd., Montreal • Toronto

SONOCO

"KNOW-HOW"

IN ACTION



Inspection check point; 3° 30' cone production.

The challenge of synthetic yarns—met by Sonoco!

The advent of filament yarns presented a unique challenge to the industry. Packaging and production problems had to be solved before the yarn could be processed. However, as always, Sonoco was ready with dependable, economical paper carriers. Sonoco anticipated the industry need and developed a completely new cone especially for man-made yarn—the now-famous 3°30' cone.

Sonoco 3°30' cones are available with smooth, Velvet or Unitex Surfaces. They are made in gray and many other solid

colors. Colored lacquer tips, lacquer rings or lacquer dots, and other special finishing, can be specified by the customer.

Sonoco 3°30' cones are typical of the dependable products manufactured by a fully integrated company with 60 years' experience in creating and producing all types of paper textile carriers. Only Sonoco, in its field, provides the necessary knowledge, skill and capacities to meet the ever-changing techniques of the textile industry. *Let Sonoco experience help you!*

SONOCO
Products for Textiles



SONOCO PRODUCTS COMPANY, HARTSVILLE, SOUTH CAROLINA • Mystic, Conn. • Akron, Ind. • Lowell, Mass. • Holyoke, Mass. • Phillipsburg, N. J. • Longview, Texas • Philadelphia, Pa. • La Puente, Calif. • Fremont, Calif. • Atlanta, Ga. • Brantford, Ontario • Granby, Quebec • Mexico City

TEXTILE BULLETIN IS PUBLISHED MONTHLY BY

CLARK PUBLISHING COMPANY

— Offices and Plant: 218 West Morehead Street, Charlotte 6 —
P. O. Box 1225 • CHARLOTTE 1, N. C. • Telephone ED 3-3173

JUNIUS M. SMITH	President and General Manager
F. R. CAREY	Vice-President and Eastern Manager (P. O. Box 10, Warwick, R. I.—Telephone TURNer 4-9824)
MARGARET R. ELLIOTT	Secretary-Treasurer
JAMES L. PRENDERGAST	Advertising Representative
JAMES W. ROBINSON	Circulation Manager
MIRIAM W. SCRUGGS	Production Manager
BEN C. THOMAS	Field-Circulation Representative

Editor JACK KISSIAH
Associate Editor DEMONT ROSEMAN JR.
Assistant Editor JOHN V. LAWING
Inquiry & Reader Service ANNE ABERNATHY

TEXTILE BULLETIN is devoted to the dissemination of information and the exchange of opinion relative to the spinning and weaving phases of the textile industry, as well as the dyeing and finishing of yarns and woven fabrics. Appropriate material, technical and otherwise, is solicited and paid for at regular rates. Opinions expressed by contributors are theirs and not necessarily those of the editors and publishers. ¶ Circulation rates are: one year payable in advance, \$1.50; two years payable in advance, \$2.00;

one year, Canada, \$3.00; one year, other countries in Postal Union, \$5.00; single copies, 25 cents. ¶ A companion monthly journal, THE KNITTER, is published by Clark Publishing Co. and devoted to the interests of the knitgoods manufacturing industry.

MEMBER: Business Publication Audit of Circulation and National Business Publications Inc.

A.T.M.A. Parade Of Progress: A Tremendous Success

THIS issue of the Bulletin is devoted largely to a digest of some of the highlights of the American Textile Machinery Exhibition-International held May 23-27 in Atlantic City, N. J. Available editorial space prevents including in this one issue descriptions of all the significant developments presented at the show, but future issues will continue to report them. Likewise some of the items included in this review will be expanded on in the months ahead.

The show seems to have been a tremendous success. Both visitors and exhibitors were pleased with it, and of course that's what counts. Total registration for the week topped 15,000 (see Page 29 for breakdown). Of that number, more than 7,000 were judged by job title to be in positions carrying purchasing influence.

Leading the Southern states in the number of visitors with purchasing influence was North Carolina with 853. Following in order were South Carolina with 457; Georgia with 270; Virginia, 166; Tennessee, 102; Alabama, 61; Florida, 20; Mississippi, 8. That's a total of 1,937 key management personnel, a fine turnout considering the time and expense involved. It's a healthy, encouraging indication of the importance Southern mills are giving the selection and purchase of new machinery and equipment. Exhibitors at the show reported that many of the mill men they talked to were definitely in a buying mood, and there were reports of orders booked throughout the week.

A novel aspect of the show was the interest shown the wide variety of foreign machinery on display. For many in attendance it was their first exposure to that much foreign machinery. Nearly all were impressed, and some were openly enthusiastic. American machinery firms can and do expect mounting competition from foreign firms. Nobody will ever know how much of it will have been triggered by this show, but it could be a gentle tug in that direction.

For those who missed the show, the Southern Textile

Exposition at Greenville the week of October 3-7 will provide an opportunity to view much of the machinery shown at Atlantic City. Textile Hall Corp., sponsors of the Greenville show, already reports a virtual sell-out of available floor space.

Confused—But Active

FOR those interested in union activities in the textile industry, the following news items have been gleaned from the daily press within a one-week period during the month of June.

CHICAGO, ILL.—The Textile Workers Union of America declared Friday (June 3) that its Front Royal, Va., local violated the union constitution by offering financial aid to a segregated private school.

William Pollock, T.W.U.A. president, told the delegates the international had to take a stand. "We, as a union, must hold our heads high and not go pussyfooting on such an issue. Let's tell the world we reject segregation."

Charles H. Carter, president of Local 1093 of Rock Hill, S. C., said, "We feel that no one from New York or anywhere else can come into the local union and tell you what to do." (From Associated Press)

TUPELO, Miss.—Pruitt L. Park, here, business representative of Local 984 of the Teamsters' Union, has been sentenced to seven years in connection with the fire which destroyed Martin Mfg. Co.'s children's wear plant in Birmingham Ridge, Miss., last November. (From Daily News Record)

CHICAGO, ILL.—Boyd E. Payton of Charlotte, N. C., today (June 3) was re-elected a vice-president of the Textile Workers Union of America. His re-election followed by a few days the filing of an appeal to the U. S. Supreme Court on his behalf against his conviction in a conspiracy to dynamite a power substation at the Harriet-Henderson Cotton Mills in Henderson, N. C. (From Associated Press)

CHICAGO, ILL.—The national convention of the Textile Workers Union of America voted today (June 2) to give Emil Rieve, its former president, an "annual honorarium of \$15,000, payable weekly."

The move came after a debate during which the charge of "payola" was made by Charles Petraska, a delegate from Thompsonville, Conn. "Why doesn't Mr. Rieve graciously retire?" Mr. Petraska asked. "This is supposed to be a nice clean union." (From Associated Press)

Somewhat confused, but still active.

Index to Advertisers

Abington Textile Machinery Works	78	General Dyestuff Co. Div. of General Aniline & Film Corp.	—	Pilot Life Insurance Co.	74
Adoff, Emil	—	Geigy Dyestuff Div. of Geigy Chemical Corp.	—	Pneumafl Corp.	—
Akron Spool Mfg. Co.	—	Georgia-Carolina Oil Co.	77	Price Spindle & Flyer Co., Inc.	14
Allen Co.	21	Gratton & Knight	—	—	—
Allen Beam Co.	72	Griffin Sons, Inc., Ira L.	—	Radiator Specialty Co.	68
Allied Chemical Corp. (Solvay Process Div.)	—	Hallman Co., Rulie L.	83	Raybestos-Manhattan, Inc.	—
American Cyanamid Co. (Fibers Div.)	—	Hart Products Corp.	—	General Asbestos & Rubber Div.	71
American Moistening Co.	—	Herr Mfg. Co., Inc.	—	Raymond Service, Inc., Chas. P.	83
American Viscose Corp.	—	Holyoke Machine Co.	—	Reiner, Inc., Robert	—
Anheuser-Busch, Inc. (Corn Products Div.)	—	Howard Bros. Mfg. Co.	10	Rhoads & Sons, J. E.	70
Antara Chemicals Div. of General Aniline & Film Corp.	62	Ideal Industries, Inc.	16 and 17	Rice Dobby Chain Co.	69
Armstrong Cork Co.	—	Ideal Machine Shops, Inc.	—	Ridenhour, Hoyt A.	83
Bahan Textile Machinery Co.	85	Industrial Coatings, Inc.	—	Roberts Company, The	3
Bahnson Co., The	—	Interlock Screw & Bolt Co.	66	Ruppright's Rotary Roof Cooler	—
Barber-Coleman Co.	75	—	—	Saco-Lowell Shops (Replacement Parts Div.)	—
Barkley Machine Works	70	—	—	Saco-Lowell Shops (Textile Machinery Div.)	—
Batson Co., Louis P.	2	—	—	Scott Testers, Inc.	—
Bendix Aviation Corp. (Eclipse Mch. Div.)	54	—	—	Seydel-Woolley & Co.	—
Benjamin Booth Co.	22	—	—	Signode Steel Strapping Co.	37, 39, 41 and 79
Bullard Clark Co., The	—	—	—	Sims Metal Works	—
Burkart-Schier Chemical Co.	68	—	—	Sinclair Refining Co.	—
Carolina Brush Co.	19	—	—	Smith Textile Apron Co.	—
Carolina Loom Reed Co.	17	—	—	Sonoco Products Co.	80
Carter Traveler Co. (Div. of A. B. Carter, Inc.)	6	—	—	Southern Machinery Co.	—
Celanese Corp. of America	12 and 13	—	—	Southern Shuttles Div.	—
Chemstrand Corp.	8 and 9	—	—	(Steel Heddle Mfg. Co.)	—
Clinton Corn Processing Co.	—	—	—	Southern Textile Works	—
Cluett, Peabody & Co., Inc.	—	—	—	Staley Mfg. Co., A. E. (Industrial Div.)	—
Cocker Machine & Foundry Co.	23	—	—	Star Paper Tube Co., Inc.	—
Corn Products Sales Co.	35	—	—	Steel Heddle Mfg. Co., and Southern Shuttles Div.	18
Crompton & Knowles Corp.	—	—	—	Steel & Tank Service Co.	—
Cronland Warp Roll Co., Inc.	69	—	—	Stover Co., Charles G.	83
Crown Chemical Co.	—	—	—	—	—
Curtis & Marble Machine Co.	—	—	—	—	—
Dary Ring Traveler Co.	72	Keever Starch Co.	27	Tennessee Corp.	61
Davis, A. Benson (Ben)	83	Kirkman & Dixon Mchry. Co.	16	Tensitron, Inc.	83
Dayco Products Co.	4 and 5	Klutt Rings, Inc.	47	Terrell Machine Co., Inc., The	28
Dillard Paper Co.	25	Koppers Co., Inc.	—	Textile Apron Co.	66
Dixon Corp.	—	Laurel Soap Mfg. Co., Inc.	—	Textile Hall Corp.	—
Dolge Co., The C. B.	—	Leesona Corp.	—	Textile Laboratories, The	77
Draper Corp.	—	Livermore Corp., H. F.	—	Textile Loom Reed Co.	—
Dronfield Bros., Ltd.	71	Long Spindle & Machinery Co.	—	Textile Shops, Inc., The	Back Cover
Eagle Roller Repair Co.	83	Loom Products Co.	—	Thomaston Mills	83
Eaton Mfg. Co. (Dynamatic Div.)	45	Loper Co., Ralph E.	66	Times Square Hotel	—
Electro-Mechanical Engineering Co.	36	Manhattan Rubber Division	71	Todd-Long Picker Apron Co.	—
Extremultus, Inc.	—	McDonough Power Equipment, Inc.	—	Ton-Tex Corp.	—
Fabronics Corp.	19	(Machine & Foundry Div.)	70	Trust Co. of Georgia	—
Ferguson Gear Co.	57	McLeod Leather & Belting Co.	73	Turner & Chapman	83
Ferguson & Associates, John	83	Meadows Mfg. Co.	72	U. S. Ring Traveler Co.	—
Foster Machine Co. (Lindly Div.)	—	Mill Devices Co. (Div. of A. B. Carter, Inc.)	6	Uster Corp.	—
Foster Machine Co.	11	Mitcham & Co., Harley	36	Watson & Desmond	—
Gaston County Dyeing Machine Co.	—	Mooresville Iron Works, Inc.	68	West Point Foundry & Machine Co.	Front Cover
Gates Rubber Co., The	—	Moretex Chemical Products, Inc.	49	Whitlin Machine Works	7
General Asbestos Rubber Div. of Raybestos-Manhattan, Inc.	71	National Aniline Div., Allied Chemical & Dye Corp.	—	Whitinsville Spinning Ring Co.	43
Owings Co., Richard A.	83	National Ring Traveler Co.	—	Wolf & Co., Jacques	—
Pabst Brewing Co.	—	National Starch & Chemical Corp.	15	(Div. of Nopco Chemical Co.)	—
Parks-Cramer Co.	—	N. Y. & N. J. Lubricant Co.	20	Wonalancet Co.	67
Penick & Ford, Ltd., Inc.	—	Nopco Chemical Co. (Jacques Wolf Div.)	—	Young Machine Co., F. A.	—
Perfecting Service Co.	—	—	—	—	—
Perkins & Son, Inc., B. F.	—	—	—	—	—
Philadelphia Quartz Co.	—	—	—	—	—

TEXTILE INDUSTRY SCHEDULE

Sept. 8-9 (Th-F)—Fall technical meeting, TEXTILE QUALITY CONTROL ASSOCIATION , The Clemson House, Clemson, S. C.	Oct. 7 (F)—Annual meeting, SOUTHERN TEXTILE OVERSEERS ASSOCIATION , Hotel Greenville, Greenville, S. C. (6 P. M.)
Sept. 8-9 (Th-F)—Annual meeting, COMBED YARN SPINNERS ASSOCIATION , The Cloister, Sea Island, Ga.	Oct. 18-19 (Tu-W)—Technical Advisory Committee and Board of Trustees Meeting, INSTITUTE OF TEXTILE TECHNOLOGY , Charlottesville, Va.
Sept. 15-16 (Th-F)—Textile Processing Symposium, AMERICAN GAS ASSOCIATION , Sedgefield Inn, Greensboro, N. C.	Oct. 18-21 (Tu-F)—Fall meeting, COMMITTEE D-13, A.S.T.M. , Sheraton-Atlanta Hotel, New York City.
Sept. 15-16 (Th-F)—Annual outing, CHATTANOOGA YARN ASSOCIATION , The Read House, Chattanooga, Tenn.	Oct. 19-22 (W-Sa)—Annual meeting, CARDED YARN ASSOCIATION , The Grove Park Inn, Asheville, N. C.
Sept. 17 (Sa)—Family outing, SOUTHERN TEXTILE OVERSEERS ASSOCIATION , Greenwood, S. C.	Oct. 22 (Sa)—Fall meeting, ALABAMA TEXTILE EDUCATION FOUNDATION , Auburn University, Auburn, Ala.
Sept. 27-28 (Tu-W)—The ninth annual CHEMICAL FINISHING CONFERENCE , sponsored by the National Cotton Council, Statler Hotel, Washington, D. C.	Nov. 12 (Sa)—Fall meeting, ALABAMA TEXTILE OPERATING EXECUTIVES , Thach Auditorium, Auburn, Ala. (Carding & Spinning Session.)
Sept. 28-30 (W-F)—Annual meeting, NORTH CAROLINA TEXTILE MANUFACTURERS ASSOCIATION , Carolina Hotel, Pinehurst, N. C.	Nov. 12 (Sa)—Fall meeting, ALABAMA TEXTILE OPERATING EXECUTIVES , Thach Auditorium, Auburn University, Auburn, Ala. (Carding and Spinning Session.)
Oct. 3-7 (M-F)—The 21st SOUTHERN TEXTILE EXPOSITION , Textile Hall, Greenville, S. C.	Nov. 12 (Sa)—Annual meeting, GEORGIA TEXTILE EDUCATION FOUNDATION , A. French Textile School, Georgia Tech, Atlanta.
Oct. 6-8 (Th-Sa)—National convention, AMERICAN ASSOCIATION OF TEXTILE CHEMISTS & COLORISTS , Sheraton Hotel, Philadelphia, Pa.	—

(M) Monday; (Tu) Tuesday; (W) Wednesday; (Th) Thursday; (F) Friday; (Sa) Saturday

CLASSIFIED ADVERTISING

TEXTILE JOBS OUR SPECIALTY!

Over 55 Years in Business

THE POSITION YOU WANT may be available right now. The demand for executives is increasing. Salaries are attractive. You are invited to send us your resume in confidence.

THE EXECUTIVE YOU NEED may be listed with us. Employers find our Service helpful and time saving.

Your phone call, wire or letter will bring prompt attention.

Charles P. Raymond Service, Inc.

Phone Liberty 2-6547
294 Washington St. Boston 8, Mass.

W. K. DICKSON & COMPANY, INC.
Consulting Sanitary Engineers
Industrial Waste Treatment,
Water Supply, and Sewerage
Reports, Investigations, Design,
Supervision of Construction
404½ S. Tryon St. Charlotte 2, N. C.

SAFETY & SERVICE EMBLEMS Our Specialty

RULLIE L. HALLMAN CO.
P. O. Box 9 Phone 582-1601
Spartanburg, S. C.

HOYT A. RIDENHOUR

"The Spinning Room Man"

Specializing In—Spindles, Bases, Bolsters
Separators, Complete With Fittings
Rings and Holders
Over 1,000,000 Spindle Units in Stock

Phone FRanklin 6-2070
3118 Monroe Road P. O. Box 9057
CHARLOTTE 5, NORTH CAROLINA

Eagle Roller Repair Works

Steel Rollers Reworked
For
Drawing, Slubber and Spinning Frames
Twisting & Cal. Rollers New or Reworked
Prompt Pick-Up & Delivery
Phone CE 2-6797 P. O. Box 835
GREENVILLE, S. C.



Loom and Warper
Beams—Shell Rolls
Special Wood Rolls
TURNER & CHAPMAN
Box 620 Griffin, Ga.

WE BUY — SELL — TRADE
RICHARD A. OWINGS CO.
TEXTILE MACHINERY & SUPPLIES
BOX 1774 PHONE CE 9-2236
GREENVILLE, S. C.

Wanted — Overseer for Cloth Room and
Finishing Dept. cotton manufacturing plant
located in North Carolina. Address reply to
Box X, care Textile Bulletin

P. O. Box 1225, Charlotte 1, N. C.

A. Benson (Ben) Davis

Textile Machinery, Manufacturers
Agent

Appraisals and Liquidations
(Sales Agent for Economy Baler Co.)
Phone JA 3-7721
P. O. Box 11112 Charlotte 9, N. C.

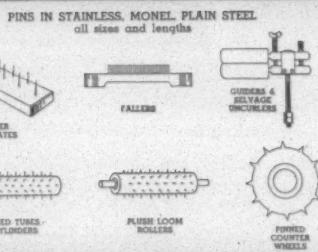
SAXI TENSION METERS
Quick Trigger Action
For Yarns, Wires, Rubber, Cords and Tape
American made and serviced, always reliable
TENSITRON, INC., HARVARD, MASS. *Patented*

BOBBINS — BOBBINS — BOBBINS

Our specialty is good used Automatic Loom
Bobbins. We also deal in Twister and Roving
Bobbins. Send us samples of what you
need or what surplus bobbins you have.

CHARLES G. STOVER COMPANY
West Point, Ga.

NEW & REPINNING



SOUTHERN TEXTILE WORKS
P. O. Box 406 • 202 South Towers St., Anderson, S. C.

TEXTILE SPRAY SYSTEMS

Stainless Steel Pumps for Tints and Emulsions, New Type Misting Nozzles. Oil Spray Pumps. We have over 25 years' experience in all types of spray applications. Contact us for your spray needs.

JOHN FERGUSON & ASSOCIATES
Box 486 LaGrange, Ga

FOR SALE

- 1—Ingersoll-Rand Air Compressor, Type ES-1, 15 x 11 single cylinder, serial #73527, with 75 HP motor. After cooler and air receiver.
- 1—Ingersoll-Rand Air Compressor, Type ES-1, 10 x 7 single cylinder, serial #89366, 1953 model with 30 HP motor, after cooler and air receiver.
- 1—Ingersoll-Rand Air Compressor, Type ES-1, 10 x 7, serial #78395. 1945 model with 20 HP motor, after cooler and air receiver.

**INTERSTATE TEXTILE
EQUIPMENT CO., INC.**

P. O. Box 927, Charlotte 1, N. C. ED 3-1894 • Empire State Building, New York 1, Penn. 6-0451



This issue of TEXTILE BULLETIN . . .

. . . features

What Was New At Atlantic City?

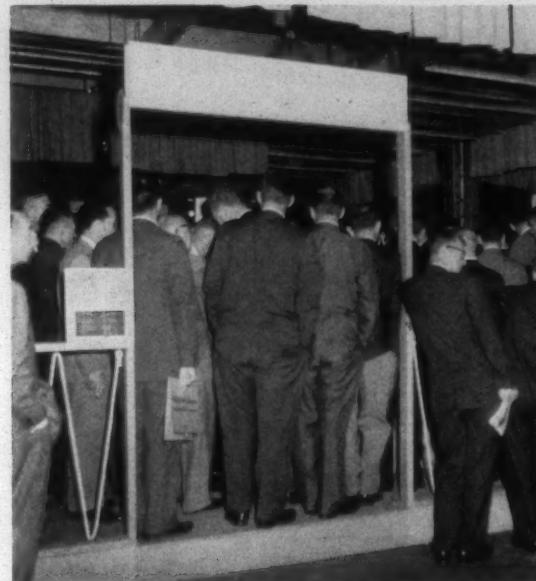
A Review Of Some Of The Highlights From The American Textile Machinery Exhibition

A Report On Attendance	29	Roving	34
Opening, Picking & Carding	29	Spinning	37
Drawing	31	Winding & Twisting	39
Combing	33	Weaving	45
		Finishing	52
		Woolen & Worsted	56

S. C. Textile Manufacturers Association Holds Annual Meeting At Sea Island, Ga.

George P. McClenaghan Named President

29
34
37
39
45
52
56



Report from Atlantic City, Page 29

Georgia Textile Manufacturers Association Holds 60th Convention At Hollywood, Fla.

Paul K. McKenney Jr. Named President

60
63
65
68



S. C. mill men meet, Page 60

. . . and includes

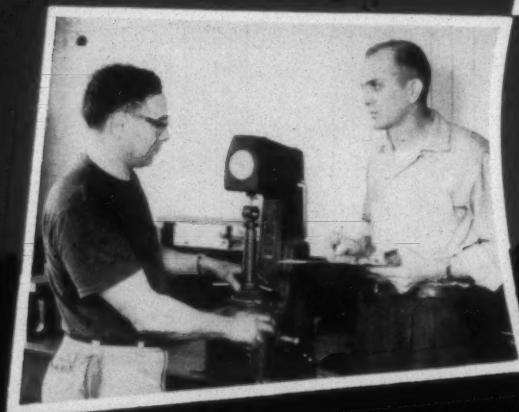
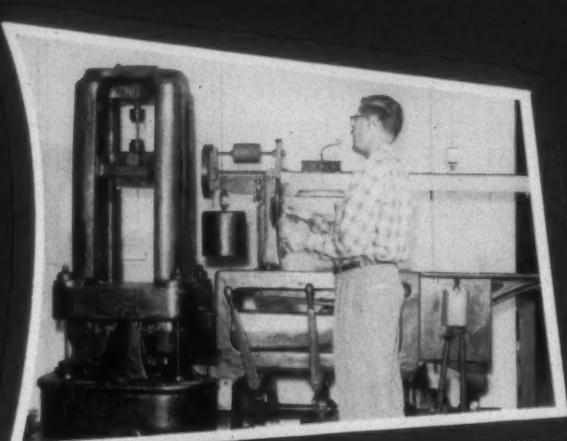
New Products	14	Mill News	78
New Literature	19	Editorials	81
News of Suppliers	24	Textile Industry Schedule	82
Personals	73	Index To Advertisers	82
Obituaries	77	Classified Advertising	83

TEXTILE BULLETIN solicits appropriate material from contributors, with payments made at regular space rates. Material should be addressed to The Editors, P. O. Box 1225, Charlotte 1, N. C.

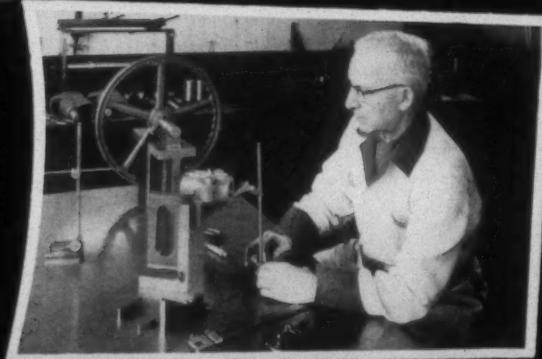


From the world of sports, Page 65

Why Bahan
Loom Parts
last longer:



METAL QUALITY CONTROL. Chemical analysis and tensile strength tests are conducted daily in the Bahan foundry to retain highest standards of metal quality.



FINAL INSPECTION. Every Bahan Loom Part is subjected to a rigid final inspection to make sure that it will function precisely on the loom and give long, dependable service.

For over 42 years Bahan has been supplying precision made loom parts to America's leading textile mills. Bahan's continuing research and development of new and better manufacturing methods have set a new standard for quality in loom parts throughout the industry. Let Bahan quote on your requirements.

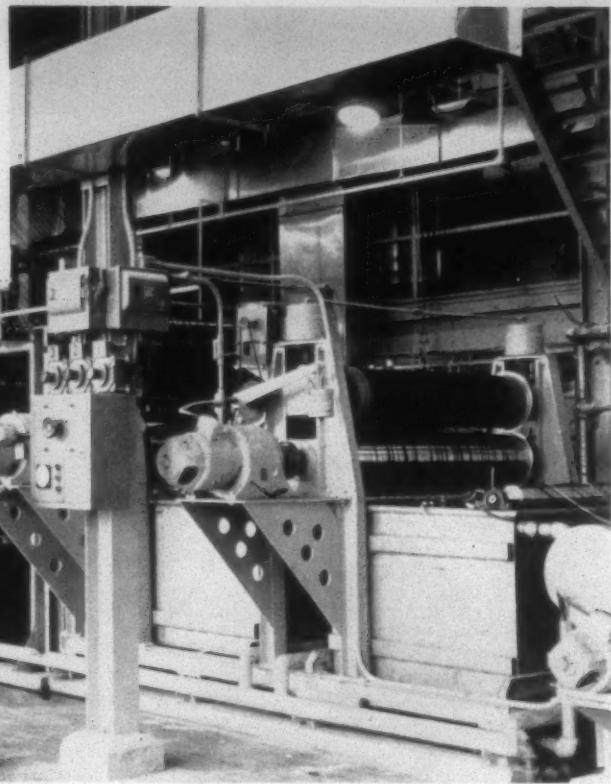
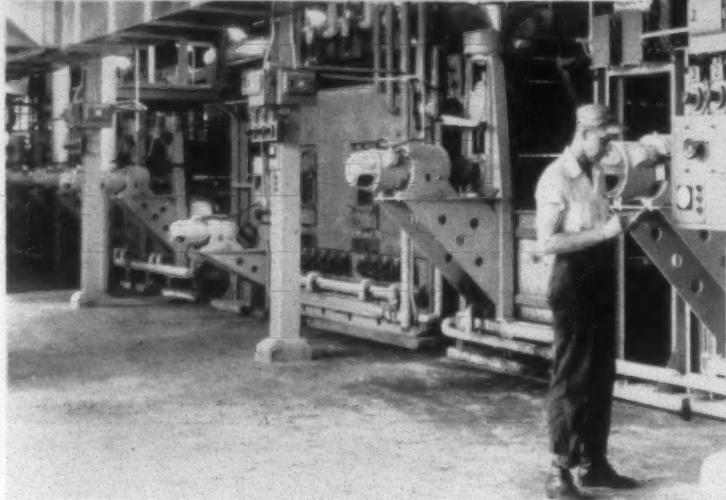
BAHAN

Precisioneered Loom Parts

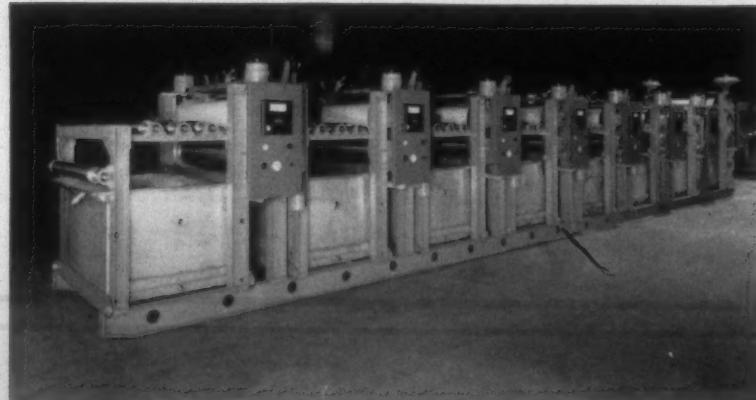
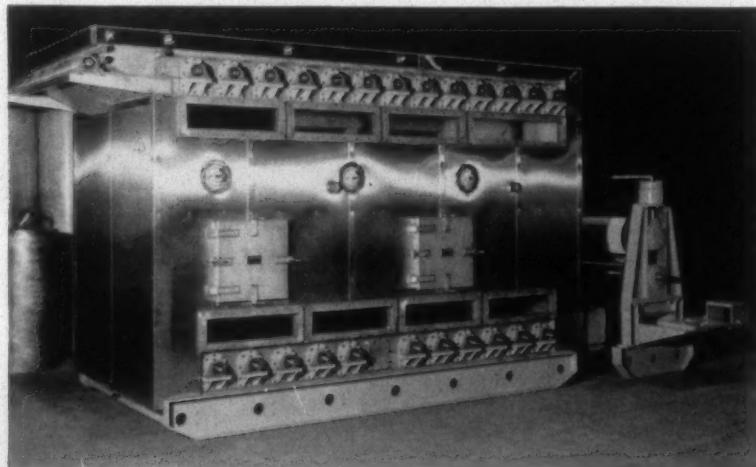
BAHAN TEXTILE MACHINERY CO., INC.
GREENVILLE, SOUTH CAROLINA

The Textile Shops INC.

SPARTANBURG, S. C.



COMPLETE RANGES. The Textile Shops builds complete ranges for dyeing, finishing, etc. Custom built to users' special requirements . . . of heavy, rugged construction for long, trouble-free life.



OPEN WIDTH WASHERS, SOAPERS AND BOIL-OFF MACHINES.
Unit or integral type construction of heavy stainless steel. Can be furnished with any number of compartments for independent or range operation. Boxes are constructed with rounded corners and no corner welds to provide for ease of cleaning and long, trouble-free service.

ADDITIONAL PRODUCTS:

Progressive (Jig) Boil-Off Machines.

Two and Three Roll Manual and Automatic Batchers.

Scrays.

Convection (Hot Air) Dryers.

Stainless Steel Hoods and Exhaust Systems.

Stainless Steel Dye Kettles.

Vacuum Cleaning Systems for Spoolers, Warpers and Nappers.

Padders and Mangles.

Special Machines.

Stationary and Magazine Creels.

STEAMERS AND AGERS. Type 316 stainless steel throughout, except for heavy structural steel shipping and mounting skids. With large access doors, top and bottom windows both sides, and ample interior lighting for clear observation of all rolls while machine is in operation. Double wiper-type seals integrally mounted with bearings to assure positive alignment for perfect, long-life sealing of roll shafts. With or without water seal box and squeeze rolls, as preferred. Particularly adapted for Acid Print Aging.